

**A STUDY TO ASSESS THE OUTCOME OF
PRANAYAMA ON MENOPAUSAL SYMPTOMS AMONG
MENOPAUSAL WOMEN IN SELECTED SETTING**



DISSERTATION SUBMITTED TO
THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY
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A STUDY TO ASSESS THE OUTCOME OF PRANAYAMA ON MENOPAUSAL SYMPTOMS AMONG MENOPAUSAL WOMEN IN ARAKKONAM

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ABSTRACT

Menopause means the natural and permanent stopping of the monthly female reproductive cycles, which is usually a manifest of a permanent absence of monthly periods and menstruation. Like menarche, menopause is an important development event in a woman's life having physical, psychological and facial implication for the women. Menopausal women suffer from many problems such as hot flushes, headache, profuse night sweating, fatigue, hair loss, insomnia, weight gain, joint pain, muscle pain, dry skin, vaginal dryness and mood disorders and it is well understood that menopausal women have been suffering from hot flushes, insomnia, headache, fatigue and profuse night sweating there is a need to overcome this unsatisfied life event.

Thus the investigator conducted a study to assist the outcome of pranayama on Menopausal symptoms among menopausal women. The objective of the study is to determine the outcome of Pranayama on selected menopausal symptoms among menopausal women in experimental & control group. The conceptual framework is based on modified Weidenbach's helping art of clinical nursing theory (1964). A quasi experimental design with evaluative approach was adopted and the study was conducted in Kainoor village and perumuchi village, Arakonam, Vellore district. 60 Menopausal women who fulfilled inclusion criteria were selected by non probability purposive sampling technique were assigned 30 samples each in experimental & control group. The variables selected for the study were age, education, occupation, type of work, type of food, mode of delivery and number of delivery. The tools used for assessment of severity of selected menopausal symptoms were modified menopausal rating scale for menopausal women. The pre test and post test was done by using the same tool. The menopausal women in experimental group practiced pranayama daily 15 minutes in the morning and evening before food for 30 days. Then the post test was assisted by using the same scale. In control group post test was done without any intervention. Descriptive and inferential statistics were used to analyze the data.

In the Experimental group, the pretest mean score was 12.60 with S.D 1.48 and in the post test the mean score was 8.17 with S.D 1.12. The calculated 't' value was 24.130 which was statistically highly significant at $p < 0.001$ level. In the control group, the pretest mean score was 12.10 with S.D 1.35 and in the post test mean score was 12.30 with S.D 1.51. The calculated 't' value was -0.902 which was not statistically significant at $p = 0.375$ level. Thus the research hypothesis stated that there is a significant relationship between Pranayama on selected menopausal symptoms among menopausal women was accepted. Therefore Nurse Midwife must continue to pranayama among menopausal women to bring the positive outcome.

CHAPTER – I

INTRODUCTION

“A woman is a creature who has discovered her own nature”

-Jean Giraudoux.

A holistic approaches to women's health programmes need to focus on all the stages of life cycle only by addressing distinctive concern of each stages there can be significant improvement in women's overall being.

Menopause is a part of every woman's life. When a woman's reproductive system slows down and eventually stops, and this stage usually occurs between the age of 40-60yrs which associated with hormonal, physical and psychological changes. This is called menopause. Menopause can also occur when ovaries are removed or stopped reproductive functioning. Menopause occurs as the ovaries stop producing estrogen, causing the reproductive system to gradually or abruptly shut down.

Menopause is not an illness but it is a natural biological process. The common symptoms include irregular menstruation changes in sexual desire, hot flashes , profuse night sweats, insomnia, fatigue, headache, vaginal dryness and urinary problems changes in appearances, mood changes, sleep disturbances, palpitations, backache, memory loss & depression, and it may also leads to the risk for heart diseases and osteoporosis occurs after menopause.

With these symptoms, the woman may also have increasingly erratic menstrual periods. The clinical features of menopause caused by lessing amounts of oestrogen, progesterone, and testosterone in the woman's body.

Menopausal symptoms affect 80% of ladies who are approaching menopause suffering with uneasiness. Some women easily adopt the changes with no uncomfortable. Typical menopausal symptoms, such as hot flushes or night sweats, are caused by changing hormonal levels in the female reproductive system.

Jaszmann et al., (2008) conducted a large incidence survey was carried out in Netherlands, of women at various stages of menopausal transition, as well as a normally menstruating group, defined as having normal menses during the year preceding the survey, precise age range not given but mean 45.3 years. Hot flushes rose to a maximum of 65% one to two years after cessation of menses and decline thereafter. Muscle and joint aches were reported in 30% of women who were regularly menstruating and this rose to 50% three years after menopause. Depression is not a feature of the menopausal years. The same is true of irritability though it increases slightly in the menopausal transition, from 28% in normally menstruating women to 37% during the climacteric. The authors believe that only hot flushes, sweating and muscle and joint aches can be seen as typical climacteric complaints.

Yoga keeps body and mind in sound health. Women practicing yoga from their middle age period they hardly notice the onset as well as passing away of the menopause period. Yoga can help to eliminate many of the uncomfortable physical and emotional feelings associates with menopause.

Pranayama (Breath control) literal meaning of pranayama is the Breath control. The aim of practising pranayama is to stimulate, regulate and harmonise vital energy of the body. Just as a bath it is required for purifying the body, so pranayama is required for purifying the mind and the body.

BACKGROUND OF THE STUDY

Menopause is not an illness but it is a natural biological process. Menopause is a complete cessation of menstruation. It is a normal physiological change experienced by middle age women from 45-55yrs. With the increased life expectancy today women spend

one-third of the life after menopause, thus more attention is needed towards peri-post menopausal symptoms. Worldwide, the average age for women to have their last monthly period is 51 yrs. Studies suggest that Indian women under menopause much earlier.

Van Keep et al.,(2010) conducted a prevalence study for 2000 women age 46-55yrs by the International Health Foundation in several European countries. In the survey many symptoms were included which may well be experienced at other times of life. 22% of the sample were reported to be still experiencing normal regular menstrual cycles. 20% of those still experiencing regular cycles reported hot flushes, it seems likely that many of them were already in the peri-menopausal phase where various climacteric changes are already taking place. The survey gives percentages of symptoms most frequently experienced in their age group of 46-55yrs, such as hot flushes 55%, tiredness 43%, nervousness 41%, headaches 38%, insomnia 32%, depression 30%, irritability 29%, joint and muscle pain 25%.

A study conducted in 2007 in Bangalore, found that Indian women are at higher risk of early menopause, before the age of 45 yrs. The data of the study was obtained from the National family health survey and examined samples from 100,000 women between 15-50yrs across 26 states. The study suggest that 4% Of Indian women experience premature menopause between 29-34yrs.

Kavimani S., et al (2008) describes that menopause normally occurs between the ages of 45 and 50 years. The average age being 47 years. It is not uncommon however to see a women menstruate well beyond the age of 50yrs. This delayed menopause may be related to good nutrition and better health. Late menopause is also common in women suffering from uterine fibroids and those at high risk for endometrial cancer. Menopause setting before the age of 40 is known as “premature menopause” or “early menopause.” Some women reach menopause at much younger age than average age especially if they had cancer or another serious illness and have undergone chemotherapy. This is sometimes referred to as a “chemical menopause”. Menopause at the age of 55-60 years is described as a “late menopause.” Menopausal age is not related to menarche, race or

socio-economic status, number of pregnancies and lactation, or taking of oral contraceptives. It is however directly associated with smoking and genetic disposition.

Smoking induces premature menopause, vaginal bleeding occurring any time after 6 months of amenorrhea in a woman of menopausal age should be considered as post-menopause bleeding and should be investigated. Premature menopause is a perplexing medical condition for researches. It may be triggered by various causes including genetic abnormalities & autoimmune ovarian damage.

The investigator had the opportunity to visit the community area and noted the menopausal women suffering with hot flushes, profuse night sweats, fatigue, headache and insomnia. Hence it has stimulated the investigator to conduct the study on outcome of pranayama on menopausal women with a special emphasis on positive well being and primary prevention.

SIGNIFICANCE AND NEED FOR THE STUDY

Yoga is an ancient Indian science and way of life that includes the practice of specific regulated breathing and meditation. The word yoga derived from Sanskrit root yuj meaning to bind the yoke. It is the true union of our will with the will of God.

Yoga makes the organs of their functioning and has good effect on internal functioning of the human body. Yoga changes for good man's views on, and attitude to, life. Yogasana and pranayama all today recognized as techniques that can improve muscle strength, flexibility, blood circulation and oxygen uptake as well as hormone function at the gross level.

Pranayama practice facilitates integrated approach of yoga that combines physical postures meditation together with the notional correction based on Philosophy of yoga was found to improve both cognitive and motor functions. This improvement was believed to be due to coordination, attention, concentration and relaxation with these promising benefits of yoga, we could hypothesis that yoga may be effective in treating the clinical symptoms of climacterics.

Breathing exercises are becoming an important part of almost all healing discipline. Studies show that a proper inhale and exhale technique, if exercised at proper intervals, has measurable medical benefits include stress reduction.

Muuyu, .etal., (2011) conducted a study recently published in the journal of yoga had a significant impact on women experiencing insomnia and other symptoms associated with menopause. Compared to the control group, the women in the study who went to two classes a week experienced “significantly lower post0treatment scores” for menopausal symptoms.

Dr.Andrew Weil received his MD from Harvard medical school and has become an internationally recognized expert on mind-body interactions and is the author of nine books. Words from a recognized expert in the field says “breath correctly”. Practitioners of yoga have known for centuries about the importance of guided breathing.

Studies have focused that breathing will reduce the hot flushes in menopausal women and relieving chronic pain .Studies released in 2008 by the US national center for complimentary & alternative medicine found that yoga was the 6th most commonly used alternative therapy in the US during 2007, in which 61% of the population were participated in that therapy.

Sulabha et al (2009) conducted a study to observe effect of yoga on menopausal symptoms using a randomized and interventional study for the menopausal womens .The result shows that the yoga is effective in treating the menopausal symptoms and should be considered as it is an effective alternative therapy for the management of menopausal symptoms.

TITLE:

Outcome of Pranayama on selected menopausal symptoms among menopausal women

STATEMENT OF THE PROBLEM

A study to assess the outcome of pranayama on selected menopausal symptoms among menopausal women, Arakkonam.

OBJECTIVES

1. To assess the pretest level of selected menopausal symptoms among menopausal women in experimental and control group.
2. To assess the post test level of selected menopausal symptoms among the menopausal women in experimental and control group.
3. To determine the outcome of pranayama on selected menopausal symptoms among the menopausal women in experimental and control group.
4. To associate the post test level of pranayama on selected menopausal symptoms among menopausal women with their selected demographic variables in experimental and control group.

VARIABLES

Independent Variable

Pranayama

Dependent variable:

Menopausal symptoms

Demographic variables:

Age in years, education, occupation, type of work, type of food, mode of delivery, number of deliveries.

RESEARCH HYPOTHESIS

H₁ – There is a significance relationship between pranayama on selected menopausal symptoms among Menopausal women.

OPERATIONAL DEFINITIONS

Outcome

Impact of pranayama on selected menopausal symptoms among menopausal women which is measured by using modified menopausal rating scale.

Pranayama

The process of inhale and exhale the breath through right nose by closing the left nose, repeat the same for left nose by closing the right nose and these can be repeated for 10 to 15 times twice a day for 4 weeks in morning and evening before food.

Menopausal Women

It refers to the women aged 45 – 50 yrs with the cessation of menses.

Menopausal Symptoms

It refers to symptoms such as hot flushes, profuse night sweating, fatigue, head ache and insomnia.

ASSUMPTIONS

1. Menopausal women may experience some menopausal symptoms.
2. Perception of menopausal symptoms may vary from women to women.
3. Pranayama may have some effect on selected menopausal symptoms among menopausal women.

DELIMITATIONS

The study was delimited to 4 weeks.

PROJECTED OUTCOME

The nurse could provide pranayama as a routine physical therapy to treat menopausal symptoms among menopausal women, which would try to maintain positive approach.

SUMMARY

This chapter consists of introduction, background, significance and need for the study, title, statement of the problem, objectives, variables, hypothesis, operational definition, assumptions delimitations, and projected outcome.

ORGANIZATION OF THE REPORT

The following chapter contains

Chapter II : Review of literature and conceptual framework.

Chapter III : Research methodology.

Chapter IV : Data analysis and interpretation.

Chapter V : Discussion.

Chapter VI : Summary, nursing implication, recommendation, and limitation of the study.

This is followed by references and appendices.

CHAPTER - II

REVIEW OF LITERATURE

A review of literature is an essential part of scientific research. It is systematic identification, location, scrutiny and summary of written materials that contain information relevant to the problem. An extensive review was done to gain insight in to the selected problem. This chapter has two sections. Part-I & Part-II

PART I-literature review

Section A: General information about yoga and pranayama.

Section B: Studies related to menopausal symptoms

Section C: Studies related to pranayama on selected menopausal symptoms among menopausal women.

PART II-conceptual framework.

SECTION – A

General information about yoga and pranayama

Yoga is an ancient natural therapy developed in India 5000 years ago, It has become one of the popular alternative therapies over the last few years.

Swami Vivekananda [2005] has stated that yoga has got a key role over the mind to control its activities to keep it calm, quiet always and to produce relaxation of the body. Yoga is explained vividly in the great scriptures like Vedas, Upanishads, Gita and Ramayana.

Bhagavad-Gita says

1. yoga is equanimity in success and failure

2. Yoga is skill and efficiency in action.
3. Yoga is supreme and success in life.
4. Yoga in serenity.
5. Yoga destroys pain.

According to Bhagavad-Gītā as it is, "prāṇāyāma" is translated to "trance induced by stopping all breathing", also being made from the two separate Sanskrit words, "prāṇa" and "āyāma"-Pranayama practice facilitates integrated approach of yoga that combines physical postures meditation together with the notional correction based on Philosophy of yoga was found to improve both cognitive and motor functions.

This improvements was believed to be due to eye, hand coordination, attention, concentration and relaxation with these promising benefits of yoga, we could hypothesis that yoga may be the cognitive dysfunction and the clinical symptoms of climaterics,

- a) vasomotor instability: Hot flashes, Profuse night sweats, Insomnia.
- b) Urogenital atrophy: Dryness, bleeding, urinary frequency, urinary urgency, urinary incontinence.
- c) Skin, soft tissues: breast atrophy, skin thinning, decreased elasticity
- d) Psychological: Mood disturbances, irritability, fatigue, memory loss, depression.
- e) Skeletal: osteoporosis, joint pain, muscle pain, back pain.
- f) Sexual: decreased libido, vaginal dryness, dyspareunia.

Benefits Of Pranayama

- a) Slowing down the heart rate as more oxygen can be pumped even with less number of breaths.
- b) Reduced wear and tear of internal organs.
- c) Lowering of blood pressure, relaxation of body tensions and quieter nerves.
- d) Increases Life- As per yoga philosophy, longevity depends on breathing rate. Lowering of breathing rate is likely to increase life. For example, a tortoise takes four to five breaths in a minute and it lives up to 200 years or more.
- e) Blood Circulation Improves- As a result of breathing, the freshly oxygenated blood travels from lungs to the heart. This improves the blood circulation and more oxygen/ prana or cosmic energy reaches all parts of body.

- f) For healthy heart the heart beats 100,000 times a day. The health of heart determines life expectancy and quality of life in old age. More oxygen in the blood means more oxygen to muscles of the heart.
- g) Functioning of body organs: Better functioning of autonomic system improves the working of lungs, heart, diaphragm, abdomen, intestines, kidneys and pancreas.
- h) Digestive system improves and diseases pertaining to digestive organs are cured.
- i) General irritability due to lethargy/ fatigue vanishes.
- j) By more oxygen, toxins are removed from body, onset of various diseases is prevented and strengthens the immune system.
- k) Provides freedom from negative and harmful mental conditions like anger, depression, greed for money, arrogance etc.
- l) Fluctuations of mind are controlled and prepare the mind for meditation.
- m) Improves concentration spiritual powers/ skills, experiencing lightness of body, feeling of inner peace and better sleep and better memory.
- n) The quality of life in old age- Relieves backaches, headaches, rheumatism, stiffening of muscles and joints.

Instructions on how to perform pranayama yoga:

Nadi Suthi:

Sit down in a comfortable place assuming a cross legged position. Close the eyes and use thumb finger (right hand) to close the right side of nose. Inhale deeply using the left nostril. Close the left nostril by ring finger and exhale using the right one. In the same way, practice with the left. Continue doing this exercise for around 10-15 times.

Surya Bedhi:

Sit in a comfortable position .cross the legs. Close left nostril with the ring finger of the right hand. Inhale deeply through the right nostril. Then close the right nostril with the right thumb .Rest the chin in the notch between the collar bone just above the breast bone. Then close the right nostril with the thumb and exhale slowly through the left nostril. Repeat this exercise in the same order.

Shitali:

Shitali also means cool, and this pranayama technique will help to achieve the same. To perform shitali pranayama, be seated in a comfortable position. Cross legs and take 5-6 deep breaths to get prepared. Protrude the tongue out and curl it like pipe. Breath with a sibilant sound (si..si..si..)to fill the lungs completely. Hold the breath for as much time as possible. Then slowly exhale through both the nostril. This can be repeated 5-10 times.

Sitkari:

Sit in the comfortable position. Cross the legs. Let the tip of the tongue touch the palate. Draw the air in through the closed teeth with a sibilant sound(si..si..si..) Hold the breath for as much as possible. Then close the mouth and exhale through the nostrils.

SECTION – B**Studies related to menopausal symptoms**

Priya et al., (2009) conducted a study to establish the age at onset of natural menopause and the prevalence of symptoms and identify any sociodemographic, physical, or other factors that may influence the onset of menopause among women in Haridwar district of Uttaranchal in northern India. Women in age group of 30-65 years were interviewed using a questionnaire that has a 4 point scale among 129 women. The green climacteric scale was used to assess the frequency and the severity of climacteric symptoms. The research concluded that the mean age at menopause was 45.02 ± 4.35 years and age at menopause computed by probit analysis was 46.82 years. The most prevalent symptoms was muscle and joint pain (55.81%), followed by feeling tired or lack of energy [51.19%], eye problems [49.61%], headache (43.41%) and feeling unhappy or depressed 36.43%.

Syeda Balool Mazhar et al., (2008) conducted a study to determine the value of Menopausal Rating Scale in assessing post menopausal climacteric symptoms. The study was undertaken at maternal and child health center unit II, Pakistan institute of medical sciences, Islamabad. The subjects were women beyond 45 years of age with amenorrhea of more than one year duration. 50 women suffering menopausal climacteric symptoms were selected and interviewed. The mean age at menopause was 48.5 years and all were multi parous. 70% of women were still symptomatic while the rest were symptom free. The MRS ranged from 9-21 score with the mean of 12. The most commonly reported symptoms were hot flushes[90%], sleep disturbances[89%] followed by palpitation[42%], sexual problem (18%) and bladder symptoms(12%) were reported less frequently.

Bansal et al., (2005) conducted a study to determine age and perception of menopause as well as prevalence of various menopausal symptoms among underprivileged women in Ahmedabad. A questionnaire was used as a tool for data collection from 100 menopausal underprivileged women in Sheth V.S. General Hospital. The results showed that 29.5% suffered from joint pain, poor memory and fatigue, 25% had irritability, 22.7% had urinary symptoms, 18.18 % had hot flushes, 6.81% dyspareunia, 4.54% leucorrhoea and anxiety and 2.27% had post menopausal bleeding. For the respondents background 62.2% were illiterate and mean age for menopause was 41-45 years. 93.18% women had not taken any treatment. The researcher concluded that uneducated and under privileged women are unaware of health care and protection, as some did not realize the need to consult doctor for their menopausal problems. They also realized the need for educating females about menopausal symptoms and its remedies.

Chaopong, P., (2005) conducted a study on menopausal symptoms and knowledge towards daily life and Hormone Replacement Therapy among 162 menopausal women who attended the health seminar about menopausal and Hormone Replacement Therapy. The result revealed that most common symptoms was muscle and joint pain and 51% of women showed their knowledge about Hormone Replacement Therapy and only 8% were currently using Hormone Replacement Therapy.

Sen (2005) conducted a study to look the specific health needs of socially settled urban women at a crucial period of their lives, in Kolkatta, where a group of urban educated upper middle class women aged 40 years and above were given a questionnaire. The results showed that the most prevalent symptom was joint pain, mostly of knee joint. Few other symptoms were memory impairment, anxiety and weight gain. Hot flush was complained by one fourth of the women. The researcher concluded that the findings were at variance with western literature, where vasomotor symptoms are sited as most prevalent in this age group and so intended to develop a wide database in near future.

Zutsi (2005) conducted a study to assess the prevalence of urinary symptoms in perimenopausal women. 500 women in the age group of 42 to 55 were given questionnaire and results showed – 334, 4% had urge incontinenes, 10.4% complained of stress incontinence, 42 patients had both, 9.4 % complained dysuria, 2.4% hesitancy, 6.4% frequency and 6% nocturia. Prevalence of urinary symptoms was not very high. Amongst those 88facing symptoms only 30 had taken any treatment – 18 allopathic, 5 homeopathic, 4 ayurvedic and 4 were operated. 13 patients reported recurrence of symptoms after taking any mode of treatment. The prevalence rate has not been found so high. The results do not match with the western figures; probably our women do not give much importance to these symptoms.

Shahetal et al., (2004) conducted a study to asses the prevalence of peri0menopausal symptoms among 250 women aged 45-50 yrs in region wise by using modified menopausal rating scale in South east Asian countries. The result shows that the dominant symptoms in this group were shoulder stiffness (Japan), hand joint pain (Korea), backache and tiredness (Taiwan) and headache (Philippines).

Rahman SA et al., (2004) conducted a study to determine the commonly reported menopausal symptoms among sarawakian women using modified Menopausal Rating Scale questionnaire among 356 women aged 40-65 years and were interviewed to document of 11 symptoms commonly associated with menopause. The most prevalent symptoms reported were joint and muscular discomfort [80.11%] physical and mental exhaustion [67.1%] and sleeping problems (52.2%).followed by hot flushes and sweating

(41.6%), irritability 37.9%, dryness of vagina (37.9%), anxiety (36.5%), depressive mood (32.6%), other complaints noted were sexual problem (30.9%) bladder problem (13.8%) and heart discomfort (18.3%).

Larkey, K (2003) conducted a study on osteoporosis and to assess the knowledge and behavior regarding food among 200 women aged between 25-55 years at south-western community. The data was collected regarding knowledge on adequate calcium intake, exercise and milk consumption. The results revealed that 70% of women were not known the important of calcium intake and doing exercise.

Roli Grantam (2003) conducted a descriptive study among menopausal women at Geneva to identify the clear relationship between menopause and estrogen and osteoporosis. With an aging population, postmenopausal osteoporosis now represents an enormous public health problem. The result revealed that 30-50% of all postmenopausal women and almost 50% of all individual over the age of 75 years have osteoporosis, 40% of 50 years old females will have an osteoporosis fracture during their life time.

Loutfy et al., (2002) conducted across section study of menopausal symptoms among 450 women from Alexandria. The findings revealed that the most frequent symptoms were tiredness 96% headaches 95.1% hot flushes 90.7% skin wrinkles 90.7% and decrease sexual desire 89%. About 91% of women never heard about hormonal replacement therapy and 12.4% were moderately active in the years before menopause. Prevalence of symptoms was significantly association with sudden onset of menopause.

Adele Pilliteri., (2002) Heart disease is the leading cause of death in women when compared to breast, ovarian and uterine cancers. As the woman reaches menopause her risk for heart disease becomes equal to that of a man.

Nor afliah et al., (2000) conducted a study to determine the prevalence of menopausal symptoms among female teachers in Malaysia by using simple random techniques. The study revealed that the prevalence of menopausal symptoms such as skin dryness 44.2% hot flushes 43.2% fatigue 41% and excessive sweating 34.7%.

Ayathollahi Smt. et al., (2000) conducted a study on sociodemography factors and age at menopause in Iran among 948 menopausal women. Among them 95% of women attained menopause in 49 years. The findings revealed that there were significant association with the family income and social class. Educational level and marital status were not significantly related to age of menopause. Regarding the work status score 3.65% does not show any significant association at 0.05 level. Regarding the marital status score 0.61% does not show any significant association with problems related to menopause at 0.05 level.

McKinlay et al., (1994) conducted a study to assess the prevalence of menopausal symptoms over 600 women in kolkatta. The age range was 45- 64yrs. Hot flushes ranged from about 18% among normally menstruating women through a maximum of 75% during the climacteric to about 29% among women who were at least nine years post-menopausal. Percentages of some other symptoms in the menopausal transition group, are reported as headaches 38.3% (compared with the 45% of women before menopause); sleeplessness 45% (compared with 20.9% before menopause); depression 55% (compared with 38.8% before menopause).

SECTION – C

Studies related to pranayama reducing selected menopausal symptoms among menopausal women

Dr. Helena Hachul., (2011) conducted a study to assess the outcome of yoga on menopausal symptoms among menopausal women. Herself and her colleagues randomly assigned 44 women to one of three groups. 15 had no treatment, 14 did stretches with a physical therapist twice a week and 15 participated in yoga classes twice a week.. After 4 months, women in the yoga group reported fewer menopause problems than those who did nothing. Women often experience hot flashes, night sweats, anxiety, and irritability during menopause, and some have trouble sleeping or feel, research has shown that yoga reduces stress levels and curbs the activity of the sympathetic nervous systems " One questionnaire rated menopause symptoms from 0 to 18 as mild, 18 to 35 as moderate and 35 and over as severe. After 4 months, women who practiced yoga had an average score of 12.4%, while

women who had no treatment, had a score of 19.9%. On a sleep questionnaire from 0 to 28, with 28 being the most severe insomnia, the yoga practitioners had an average score of 9.7%, while those with no treatment scored 13.7%.

Susan G. Komen (2011) conducted a study to reduce the stress and creating a heightened sense of awareness and acceptance about one's physical and mental state. In Breast Cancer Foundation, 37 Women of early stage of breast cancer who reported experiencing hot flashes. Women were randomized to participate in an eight weeks in experimental group. During the two hour sessions, yoga therapists lead their classes through gentle physical stretching postures, breathing exercises, meditation techniques, study of yoga principles and group discussions. The women who participated in the yoga program not only showed significant declines in the frequency and severity of their hot flashes but also experienced decreased fatigue, joint pain, sleep disturbance, and symptom-related distress. These improvements continued to be seen in the yoga group compared to the wait-listed group even three months after the sessions concluded other mind-body practitioner may be able to provide instruction in breathing and meditation techniques to help manage stress and alleviate bothersome menopausal symptoms.

Kim E Innes, et al., (2010) Study conducted to find a systematically review the peer-reviewed literature regarding the effects of self-administered mind-body therapies on menopausal symptoms. Methods used to identify qualifying studies, were searched 10 scientific databases and scanned bibliographies of relevant review papers and all identified articles. 21 papers representing 18 clinical trials. Results suggest that breath-based and other relaxation therapies also show promise for alleviating vasomotor and other menopausal symptoms, although intergroup findings were mixed. Collectively, findings of these studies suggest that yoga-based and certain other mind-body therapies may be beneficial for alleviating specific menopausal symptoms.

Little, et al., (2010) The study was conducted to evaluate changes in the quality of sleep and activities of daily living for people over 55yrs following the practice of yoga relaxation techniques. In this non-controlled trial, people over the age of 55 with sleep disturbance were recruited randomly. Samples were asked to complete an Activities of Daily Living Questionnaire (ADL) and a modified Pittsburgh Sleep Quality Index (PSQI)

within six weeks. Participants undertook a twice-weekly, 40-minute, chair-based Yoga relaxation program, consisting of gentle movements, breath awareness exercises and a guided relaxation. At the completion of the 60 weeks the majority of participants reported a meaningful improvement in enjoyment of life and the level of energy they started the day with improvement in the quality and quantity of sleep.

R. Chattha, et al., (2009) The study conducted in Swami Vivekananda Yoga Anusandhana Samsthana in Bangalore , explains that both groups showed improvements in concentration, the improvement in yoga group was considerably high. During the performance by the groups on memory and intelligence with 10 components, the yoga group scored eight, while the control group scored six. Even during the seven subtests, the yoga group showed remarkable improvements in comparison to the control group. This study shows that yoga is even superior to other physical activities in enhancing cognitive functions which could be due to the focus that yoga lays on breathing, synchronization of breathing with body movements, and relaxation.

Dr.Bhatra, et al.,(2008) conducted a study to assess the outcome of yoga on menopausal symptoms among menopausal women.120 women of the age group 44 to 55 years, with physical and cognitive symptoms of menopause, were randomly assigned yoga exercises such as simple stretching five days a week for eight weeks. The postures and breathing were included in the yoga intervention. After eight weeks, women in the yoga group reported significant reduction of night sweats, hot flashes and sleep disturbances, while women in the control group did not report any such changes.

Mouloud Ad et al., (2008) conducted a study to evaluate outcome of yoga on menopausal syndrome, A total of 47 post menopausal women among 45-63yrs participated in a 12 weeks restorative yoga intervention. Menopausal symptoms were assessed before intervention, at 4th week and 12th week. After intervention symptoms were observed through 20 item checklist that embedded menopausal symptoms questions were scored on a scale. If the total score was above 15 women were selected for yoga practice which include breathing techniques. Posture and relaxation process taught by certified yoga teacher and found significant improvement from pretest to post test.

Chattha.R et al., (2008) conducted a randomized controlled study in 14 centers of yoga research in Bangalore, to assess the effect of a regularly practiced yoga on perimenopausal symptoms such as hot flashes, night sweats and sleep disturbances. They randomized 120 peri-menopausal women between the ages of 40-55 years to experimental and control group. The women in the experimental group practiced yoga postures (asanas) breathing exercise and cyclic meditation for 1 hr/day per week. The control group participated in supervised simple physical exercises for the same amount of time per week and she found that women in the experimental group experienced a greater reduction in the hot flashes, night sweats, and sleep disturbances against than the control group.

Gimbel (2008) stated that Hatha yoga creates balance, physically and emotionally, by using postures, or asanas, combined with breathing techniques, or pranayama. Meditation guided imagery not only support the physical and emotional work being done by the postures and breathing, they open door to self-actualization to create the perfect union of mind, body and spirit.

Dhungel, et al., (2008) conducted a study to identify the effect of alternative nostrils breathing exercise on cardio respiratory functions subjects performed alternative nostril breathing exercise for 15 minutes in the morning for 4 weeks. Results showed that a significant increment in peak expiratory flow rate (PEFR)L/min, pulse pressure (pp) decrease in systolic blood pressure, respiratory rate (RR).

Ne hadi et al., (2007) conducted a study to evaluate the outcome of yoga on physical and mental health. This study was designed with that purpose using the questionnaire in 107 volunteers [44 males and 63 females, mean age 34 (standard deviation 7) years] who attended yoga classes for 6 months. They completed the questionnaire before and after the yoga practice. There was significant improvement in scores for all health items. The differences according to age, sex and education level were not significant. It is concluded that yoga can improve physical and mental health, and promotes well-being.

Kitko (2007) stated that nurses should understand the non-pharmacological benefits of pranayama or rhythmic breathing as a nursing intervention .It is integral to the art of nursing practice and can facilitate comfort and healing in the hospitalized patients. Rhythmic breathing may serve as a beneficial adjuvant nursing intervention.

Sunita M, et al., (2006) conducted a study to evaluate the impact of Pranayama and Yoga asanas on blood lipid profiles and free fatty acids, on normal healthy volunteers, 41 men and 23 women, in two stages. In stage-I, Pranayama was taught for 30 days and in stage-II, yogic practices were added to Pranayama for another 60 days. A significant reduction was observed in triglycerides, free fatty acids and VLDL-cholesterol in men and free fatty acids alone were reduced in women at the end of stage-I. A significant elevation of HDL-cholesterol was seen only in the men at the end of stage-I. At the end of stage-II, free fatty acids increased in both men and women, and women demonstrated a significant fall in serum cholesterol, triglycerides, LDL-and VLDL-cholesterol. The results indicated that HDL-cholesterol was elevated in men with Pranayama, while triglycerides and LDL-cholesterol decreased in women after yogasanas. The results of the present study indicate that Pranayama and yogasanas can be helpful in patients with lipid metabolism disorders such as coronary heart diseases.

J Altern.,(2005) Conducted a pilot study suggests that yoga may provide a feasible treatment option for previously yoga-naïve, obese patients >50 years of age and offers potential reductions in pain and disability caused by knee osteoarthritis. Future studies should compare yoga to other non pharmacologic interventions for knee OA, such as patient education or quadriceps strengthening exercises.

Cohen BE Kanaya, et al., (2004) conducted a study to determine the feasibility and acceptability of a restorative yoga intervention for the treatment of hot flashes in 14 postmenopausal women experiencing moderate to severe hot flashes per day .As intervention consisted of eight restorative yoga taught daily 3hrs for 8 weeks. Result shows that mean number of hot flashes per week decreased by 30.8%. Our results indicate that a larger, randomized controlled trial to explore the efficacy of restorative yoga for treatment of menopausal symptoms would be safe and feasible.

Ram, et al., (2003) conducted a six randomized controlled trials to identify the effectiveness of breathing retraining for asthma. Result showed that breathing retraining may have a role in the treatment and management of asthma.

Unpublished article., (2003) conducted a study to assess the effect of yoga on the climacteric symptoms, perceived stress, and personality in perimenopausal women. 125 participants ages 40-55 yrs were divided into yoga and control group. The yoga group practiced an integrated approach to yoga therapy comprising surya namaskara (sun salutation), pranayama (breathing practices), and avartan dhyan (cyclic meditation) whereas the control group practiced a set of simple physical exercises for 8 weeks (1 h daily, 5 days per week). Assessments by Greene Climacteric Scale, Perceived Stress Scale, and Eysenck's Personality Inventory before and after the intervention. The results showed a significant difference between groups in the vasomotor symptoms, a marginally significant difference in psychological factors but not in the somatic component. Effect sizes were higher in the yoga group. This concludes that study 8 weeks of an integrated approach to yoga therapy decreases climacteric symptoms, perceived stress, and neuroticism in perimenopausal women better than physical exercise.

Danucalor, et al., (2000) stated that the oxygen uptake and carbon dioxide output were statistically different during meditation and pranayama practices when compared with the rest, they suggested that meditation and reduces the metabolic rate whereas the pranayama technique increases when compared with the rest stage.

Kennedy (1990) states that yoga techniques may offer insight into useful breathing practices and control of important variables yogic slow breathing practice promote dominance of the parasympathetic system, can help to control stress and contribute to treatment programs for chronic diseases.

Vedan et al., (1986) conducted a study to identify the long term efficacy of the integrated approach of yoga therapy in the management of bronchial asthma .After an initial integrated yoga training programs 2-4wks,570 bronchial asthmatics.

PART – II

CONCEPTUAL FRAMEWORK

The conceptual frame work and the model for the present study is based on Weidenbach's helping art of clinical nursing theory [1964]. It describes a desired situation and a way to attain it. It directs action towards the implicit goal. This theory consist of three factors central purpose, prescription, and realities. A nurse develops a prescription based on central purpose and implements it according to the realities of the situation.

1. Central purpose is the model refers to what to accomplish. It is the overall goal towards which a nurse strives. It transcends the immediate intent of the assignment or basic by specifically directing towards the patient good.
2. Prescription refers to the plan of care for a patient. It specifies the nature of action that will fulfill the nurse's central purpose and the rationale of the action
3. A reality refers to the physical, psychological, emotional, spiritual factors that come into play in a situation involving nursing action. The five realities are
 - a. Agent
 - b. Recipient.
 - c. Goal
 - d. Means
 - e. Frame work.

The conceptualization of nursing practice according to this theory consists of three steps which are as follows:

- I. Identifying the need for help.
- II. Ministering the need for help.
- III. Validating the need for help.

The model adopted for this study is a modified form of Weidenbach's helping art of clinical nursing theory. The investigator adopted this model and perceived apt in enabling to assist the effectiveness of pranayama on selected menopausal symptoms among menopausal women. This model views the selected menopausal symptoms among menopausal women as an individual unique experience that is in need for relief from menopausal symptoms.

The central purpose of the study is to reduce severity of menopausal symptoms among menopausal women. The investigator planned the prescription that will fulfill the central purpose (reduce the level of menopausal symptoms) by identifying the various means to achieve the goal. Thus the investigator selected two groups where pranayama is provided for one group and mass health education was given for the other group after the study.

The realities identified is the

- a) Agent-investigator
- b) Recipient-menopausal women
- c) Goal- reduce the level of menopausal symptoms.
- d) Means- pranayama.
- e) Environment – home / community setting.

MODIFIED WEIDENBACH'S HELPING ART OF CLINICAL NURSING THEORY (1964)

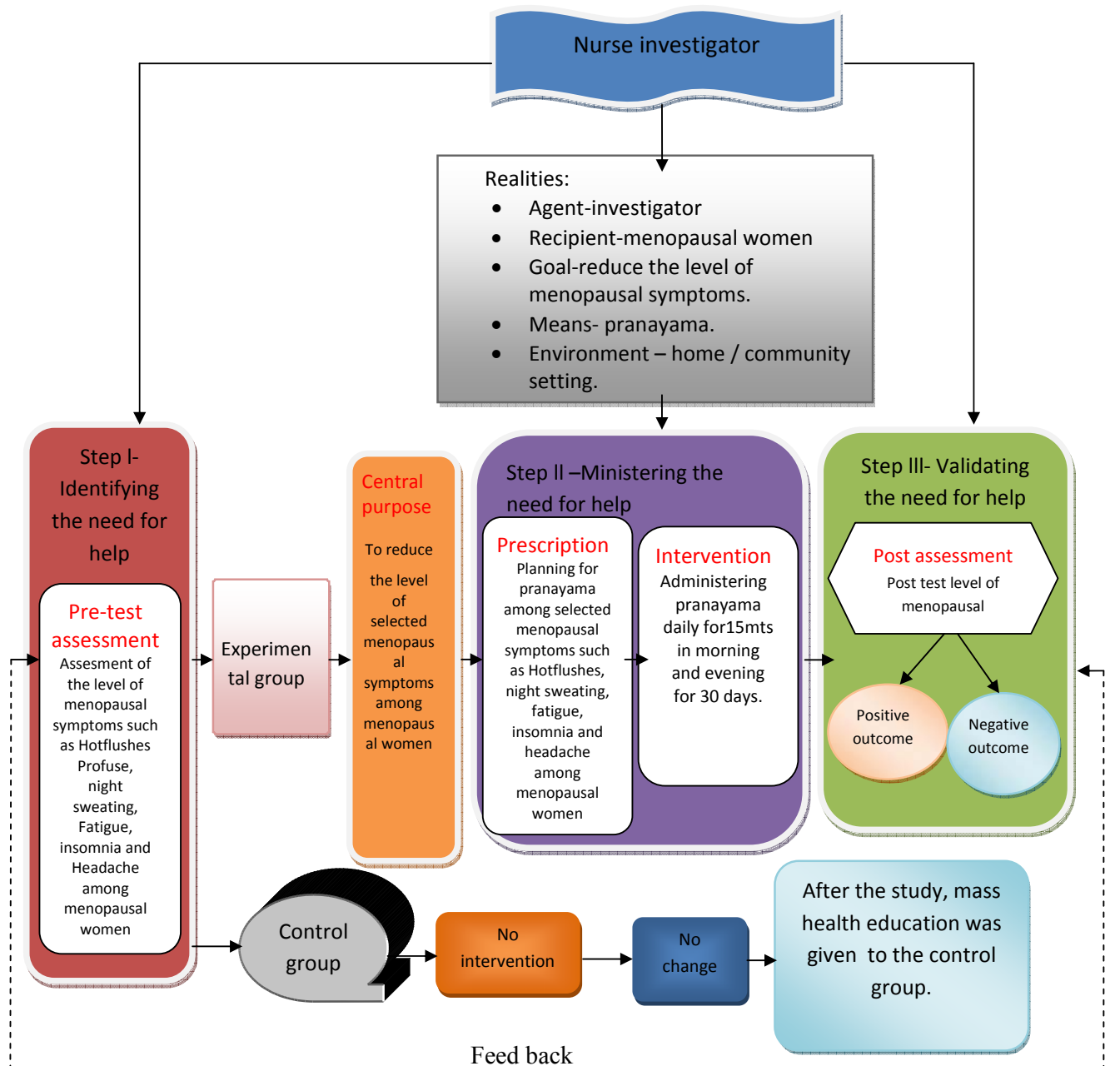


Figure (i) Shows the modified weidenbach's helping art of clinical nursing theory (1964)

CHAPTER – III

RESEARCH METHODOLOGY

This chapter explains the methodology adopted by the investigator to assess the level of menopausal symptoms among menopausal women. It deals with the research approach, research design, and setting of the study, population, sample and sampling technique, method of developing the tool, description of the tool, validity of the tool, ethical consideration, pilot study, data collection procedure and data analysis procedure.

Research Approach

Evaluative approach.

Research Design

The study designed chosen for the study is quasi experimental research design. It was represented as

Group	Pretest assessment	Intervention (pranayama)	Posttest assessment
Experimental	O ₁	X	O ₂
Control	O ₁	-	O ₂

VARIABLES

Independent Variable

Pranayama

Dependent Variable

Menopausal symptoms

Demographic Variables

Age in years, education, occupation, type of work, type of food, mode of delivery, number of deliveries

Research Setting

The study was conducted in rural area of Perumuchi Village for experimental group in Arakkonam, Vellore District, and the control group in Kainoor Village. The distance between these two villages is 10 Kms. The rural area was selected on the basis of

- 1) Geographical proximity.
- 2) Availability of subjects.
- 3) Feasibility in conducting the study.

POPULATION

Target Population:

It includes all menopausal women.

Accessible Population

It comprises of menopausal women aged between 45-50 years residing in perumuchi village and Kainoor village, Arakonam Taluk, vellore district.

Sample

Menopausal women aged between 45-50 years who fulfilled inclusion criteria..

Sample Size

The sample size comprises of 60 menopausal women who fulfilled the inclusion criteria. 30 samples each in experimental and control group.

Sampling Technique

Non probability purposive sampling technique.

CRITERIA FOR SELECTION OF SAMPLES

Inclusion Criteria

1. The women who were in the age group of 45 – 50 yrs.
2. The women who were experiencing the selected menopausal symptoms such as hot flashes, profuse night sweating, head ache, fatigue and insomnia.

Exclusion Criteria

1. Menopausal women with medical disorders such as diabetes Mellitus and hypertension etc.,
2. Menopausal women who were under medical treatment.
3. Women who were not willing to participate.

Method of development of tool

The following steps were carried out in developing the tool

- i. Literature review
- ii. Experts opinion

Description of the Tool

The tool consists of two parts

Section-A: It deals with demographic variables such as age, education, occupation, type of work, type of food, mode of delivery and no of deliveries.

Section-B: Modified menopausal rating scale scores between 0-3 which indicates

0 = Not experiencing

1 = Once in a week

2 = 2 - 3 Times in a week

3 = Daily experiencing

Scoring key:

0 – 5	-	MILD
6 – 10	-	MODERATE
11 – 15	-	SEVERE

Validity of the Tool

The validity was obtained from nursing experts, yoga professor and gynecologist. All the correction said by the experts was incorporated into the study.

Reliability of the Tool

The reliability of the tool was established by inter-rater method. The correlation value $r=0.8$. The score indicates a high correlation and considered as reliable.

ETHICAL CONSIDERATION

The study was conducted after the approval of dissertation committee. The consent was taken from village administrative officer and medical officer before proceeding with study. menopausal women were explained clearly about the study purpose and consent from menopausal women was obtained before intervention. All information about samples was kept confidential.

PILOT STUDY

Pilot study was conducted from 15-5-2011 to 15-6-2011 consent was obtained from village administrative officer before proceeding with study, 6 menopausal women who fulfilled inclusion criteria were selected and assigned to the experiment and control group. A brief introduction about self and study were explained. Consent was obtained and confidentiality of the response was assured. Pre-test was done by modified menopausal rating scale. Menopausal women in experimental group practiced pranayama and then the level of menopausal symptom was assessed by using same scale.

But in control group post-test was assessed without any intervention and the reliability of the tool was established by using inter-rater reliability method ($r=0.8$). This trial run study revealed the clarity, feasibility and practicability in all aspects to conduct the study.

DATA COLLECTION

The main study was conducted from 16 - 6 -2011 to 16-7-2011. Written consent was obtained from village administrative officer before proceeding with study. Menopausal women who fulfilled inclusion criteria were selected and assigned to the

experimental and control group. A brief introduction about self and study were explained. Consent was obtained and confidentiality of the response was assured. Pre-test was done by using structured interview questionnaire method and by using modified menopausal rating scale.

Menopausal women in experimental group practiced pranayama daily in the morning and evening for 15 minute. In control group menopausal womens were not practiced pranayama. Following last day intervention post test were done by the same questionnaire and by using modified menopausal rating scale. After the study a mass health education was given to the control group.

DATA ANALYSIS PROCEDURE

Descriptive and inferential statistics were used to analyze the data analysis of demographic variables in terms of frequency and percentage distribution, mean and standard deviation was used to compute the Pre and Post test level of selected menopausal symptoms among menopausal woman in experimental and control group. Paired “t” test was used to evaluate the outcome of pranayama on among selected menopausal symptoms among menopausal woman and chi-square test was used to associate the post test level of selected menopausal symptoms among menopausal woman in experimental group with their demographic variables.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretations of data collected from 60 menopausal women (30 Experimental and 30 Control) on menopausal symptoms to evaluate the outcome of pranayama on selected menopausal symptoms among menopausal women in Arakonam, Vellore District.

ORGANISATION OF DATA

The findings of the study were grouped and analyzed under the following sections.

- Section A:** Frequency and percentage distribution of demographic variables of selected menopausal symptoms in Experimental and control group.
- Section B:** Assessment of pretest level of selected menopausal symptoms in the experimental group and control group.
- Section C:** Assessment of posttest level of selected menopausal symptoms in the experimental group and control group.
- Section D:** Comparison of pretest and post test level of selected menopausal symptoms in the experimental and control group.
- Section E:** Association of post test level of menopausal symptoms with the demographic variables in the experimental group.

SECTION-A

Table I

Frequency and percentage distribution of demographic variables in the experimental and control group

n=60

Demographic Variables	Experimental Group		Control Group	
	No.	%	No.	%
Age in years				
45 - 46 years	8	26.67	8	26.67
47 - 48 years	12	40.00	12	40.00
49 - 50 years	10	33.33	10	33.33
Education				
Illiterate	6	20.00	7	23.33
Primary	13	43.33	11	36.67
Higher secondary	9	30.00	8	26.67
Graduate	2	6.67	4	13.33
Occupation				
Govt. employee	-	-	3	10.00
Private	3	10.00	9	30.00
House wife	27	90.00	18	60.00
Type of work				
Sedentary	10	33.33	11	36.67
Moderate	14	46.67	13	43.33
Heavy	6	20.00	6	20.00
Type of food				
Vegetarian	3	6.67	3	10.00
Non vegetarian	27	93.33	27	90.00

Mode of delivery				
Normal delivery	17	56.67	15	50.00
LSCS	13	43.33	15	50.00
Number of delivery				
1	3	10.00	8	26.67
2	16	53.33	11	36.67
More than two	11	36.67	11	36.67

Table I shows frequency and percentage distribution of demographic variables in experimental and control group.

With regard to the age in years, in experimental group 12(40.00%) were in the age group of 47-48 years, 10(33.33%) were in the age group of 45-46years and 8(26.67%) were in the age group of 49-50years, and in control group 12(40.00%) were in the age group of 47-48 years, 10(33.33%)were in the age group of 49-50years, and 8(26.67%) were in the age group of 45-46 years.

Considering the education, in experimental group 13(43.33%) were in primary education, 9(30.00%) were in Higher secondary education, 6(20.00%) were illiterates, 2(6.67%) were graduates, and in control group 11(36.67%) were in primary education, 8(26.67%) were in Higher secondary education, 7(23.33%) were illiterates, 4(13.33%) were graduates.

With regard to the occupation, in experimental group 27(90.00%) were Housewives, 3(10.00%) were working in private concern, none of them working as government employee, and in control group 18(60.00%) were Housewives, 9(30.00%) were working in private concern, 3(10.00%) working as government employee.

Considering the type of work, in experimental group 14(46.67%)were moderate workers, 10(33.33%) were sedentary workers, 6(20.00%) were Heavy workers, and in control group 13(43.33%) were moderate workers, 11(36.67%)were sedentary workers, 6(20,00%) were Heavy workers.

Regarding the type of food, in experimental group 27(90.00%) were nonvegetarian, 3(10.00%) were vegetarian, and in control group 27(90.00%) were non vegetarian 3(10.00%) were vegetarian.

With regard to mode of delivery, in experimental group 17(56.67%) were Normal delivery, 13(43.33%) were undergone LSCS, and in control group 15(50.00%) were undergone Normal delivery and LSCS.

Considering the number of delivery, in experimental group 16(53.33%) were delivered 2 children, 11(36.67%) were delivered more than two children, 3(10.00%) were delivered one child, and in control group 11(36.67%) were delivered 2 children, and 11(36.67%) were delivered more than 2 children, 8(26.67%) were delivered one child.

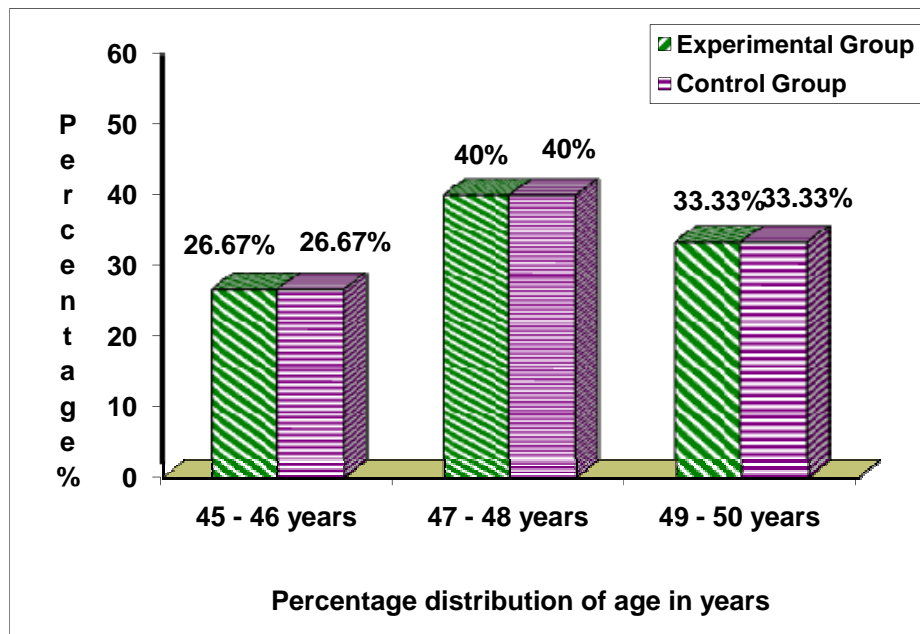


Figure (ii) Shows the percentage distribution of age in years of menopausal women

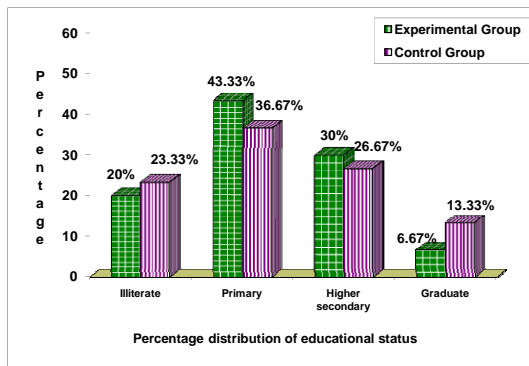


Figure (iii) Shows the percentage distribution of educational status in menopausal women

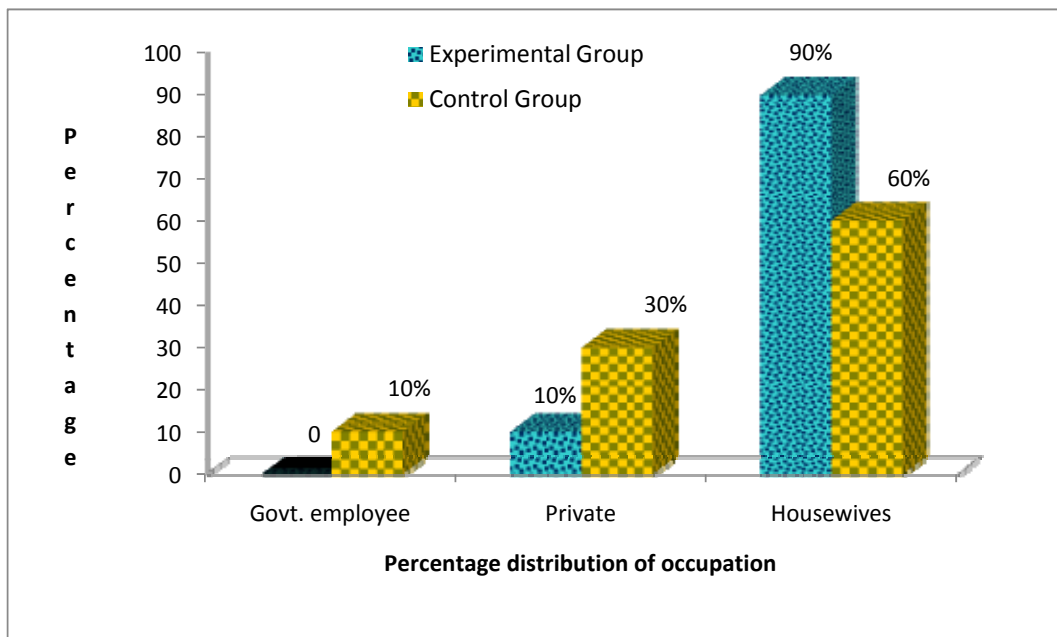


Figure (iv) Shows the percentage distribution of occupation of the menopausal women

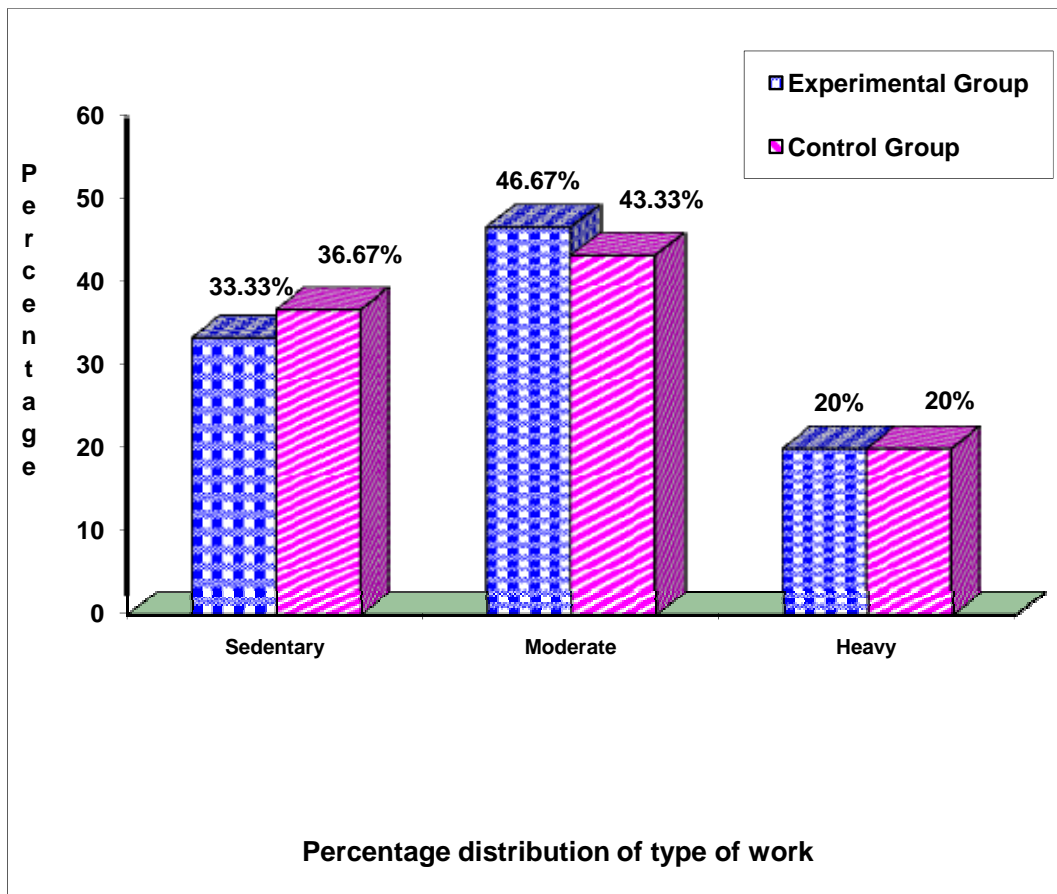


Figure (v) shows the percentage distribution of type of work in the menopausal women

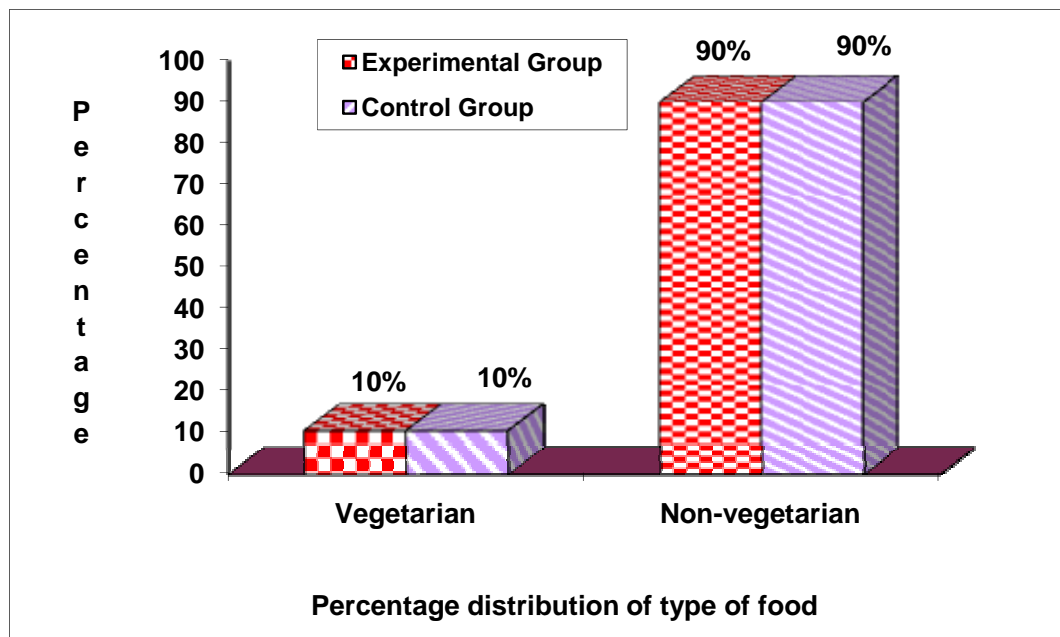


Figure (vi) shows the percentage distribution of type of food

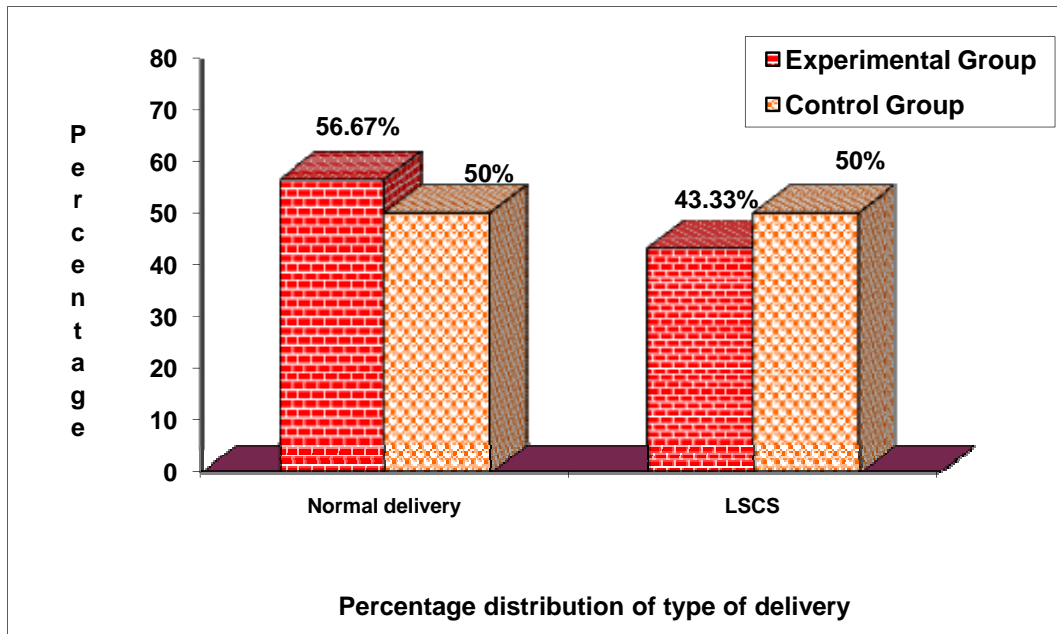


Table (vii) shows the percentage distribution of type of delivery of women

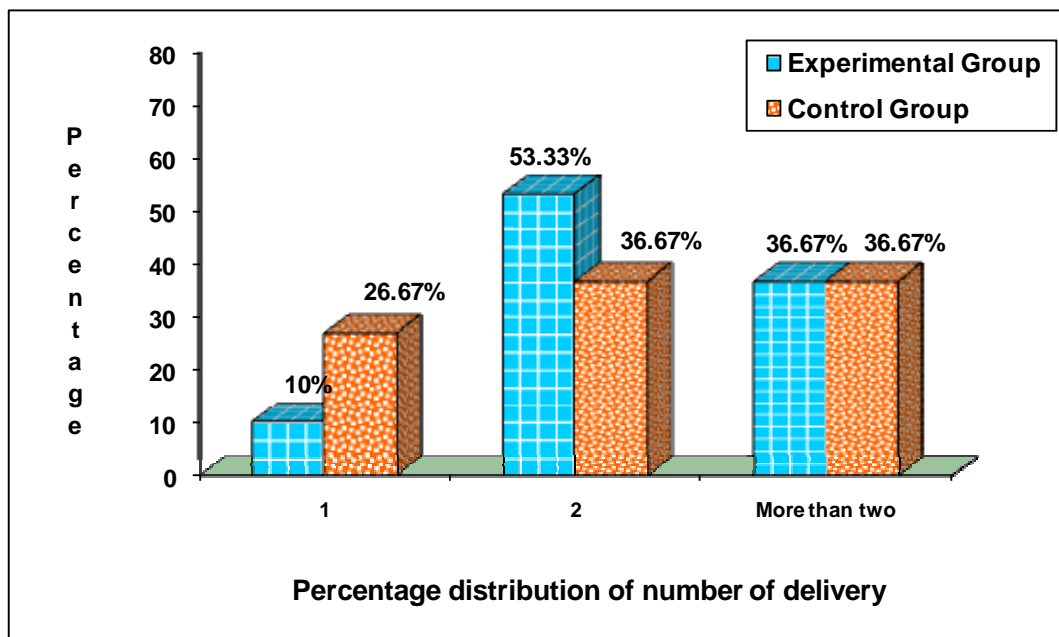


Figure (viii) shows the percentage distribution of number of delivery

SECTION – B

Table –II

Frequency and percentage distribution of pretest level of selected menopausal symptoms in the experimental group

n = 30

Menopausal Symptoms	No		Mild		Moderate		Severe	
	No.	%	No.	%	No.	%	No.	%
Hot flashes	2	6.67	-	-	12	40.0	16	53.33
Profuse night sweating	-	-	-	-	11	36.67	19	63.33
Fatigue	-	-	-	-	12	40.0	18	60.0
Headache	2	6.67	1	3.33	12	40.0	15	50.0
Insomnia	-	-	1	3.33	9	30.0	20	66.67

The table II shows that the frequency and percentage distribution of pretest level of selected menopausal symptoms in the experimental group.

With regard to hot flashes, majority 16(53.33%) had severe level, 12(40%) had moderate level, 2(6.67%) had no hot flashes, and none of them are in mild level of hot flashes.

With respect to profuse night sweating, majority 19(63.33%) had severe level, and 11(36.67%) had moderate level, none of them had mild level, and none of them had no profuse night sweating.

Considering the fatigue, majority 18(60%) had severe level, and 12(40%) had moderate level of fatigue, none of them had mild level, and none of them had no fatigue.

Regarding headache, majority 15(50%) had severe level, 12(40%) had moderate level, and 2(6.67%) had no symptom of headache and 1(3.33%) mild level of headache.

With respect to insomnia, majority 20(66.67%) had severe level, 9(30%) had moderate level, and 1(3.33%) had mild level, none of them had no insomnia.

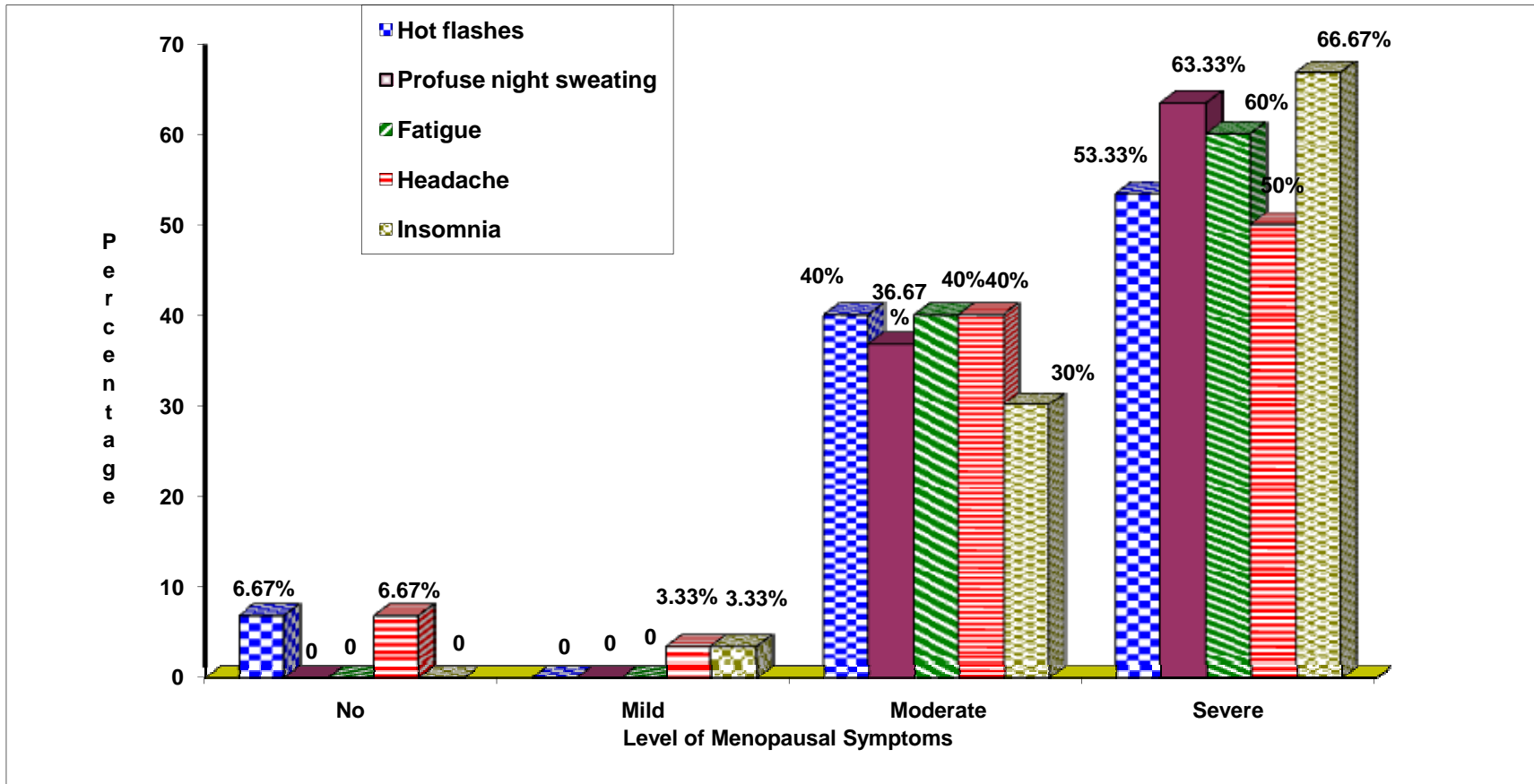


Figure (ix) Shows the percentage distribution of pretest level of menopausal symptoms in the experimental group

Table –III
Frequency and percentage distribution of pretest level of selected menopausal
symptoms in the control group

n=30

Menopausal Symptoms	No		Mild		Moderate		Severe	
	No.	%	No.	%	No.	%	No.	%
Hot flashes	3	10.0	-	-	13	43.33	14	46.67
Profuse night sweating	2	6.67	-	-	15	50.0	13	43.33
Fatigue	-	-	-	-	14	46.67	16	53.33
Headache	1	3.33	-	-	11	36.67	18	60.0
Insomnia	1	3.33	-	-	13	43.33	16	53.33

The table III shows that the frequency and percentage distribution of pretest level of selected menopausal symptoms in the control group.

With regard to hot flashes, majority 14(46.67%) had severe level, 13(43.33%) had moderate level, 3(10%) had no hot flashes, and none of them had mild level of hot flashes.

With respect to profuse night sweating, majority 15(50%) had moderate level , 13(43.33%) had severe level, 2(6.67%) had no profuse night sweating and, none of them had mild level of profuse night sweating.

Considering the fatigue, majority 16(53.33%) had severe level and 14(46.67%) had moderate level and none of them had mild level, and none of them had no symptom of fatigue.

Regarding headache, majority 18(60%) had severe headache, 11(36.67%) had moderate and 1(3.33%) had no headache and none of them had mild level of headache.

With respect to insomnia, majority 16(53.33%) had severe level, 13(43.33%) had moderate level, 1(3.33%) had no insomnia and none of them had mild level of insomnia.

Table-IV
Frequency and percentage distribution of posttest level of selected menopausal symptoms in the experimental group

n=30

Menopausal Symptoms	No		Mild		Moderate		Severe	
	No.	%	No.	%	No.	%	No.	%
Hot flashes	2	6.67	9	30.0	18	60.0	1	3.33
Profuse night sweating	-	-	6	20.0	24	80.0	-	-
Fatigue	-	-	8	26.67	22	73.33	-	-
Headache	2	6.67	7	23.33	21	70.0	-	-
Insomnia	2	6.67	14	46.67	14	46.67	-	-

The table IV shows the frequency and percentage distribution of posttest level of selected menopausal symptoms in the experimental group.

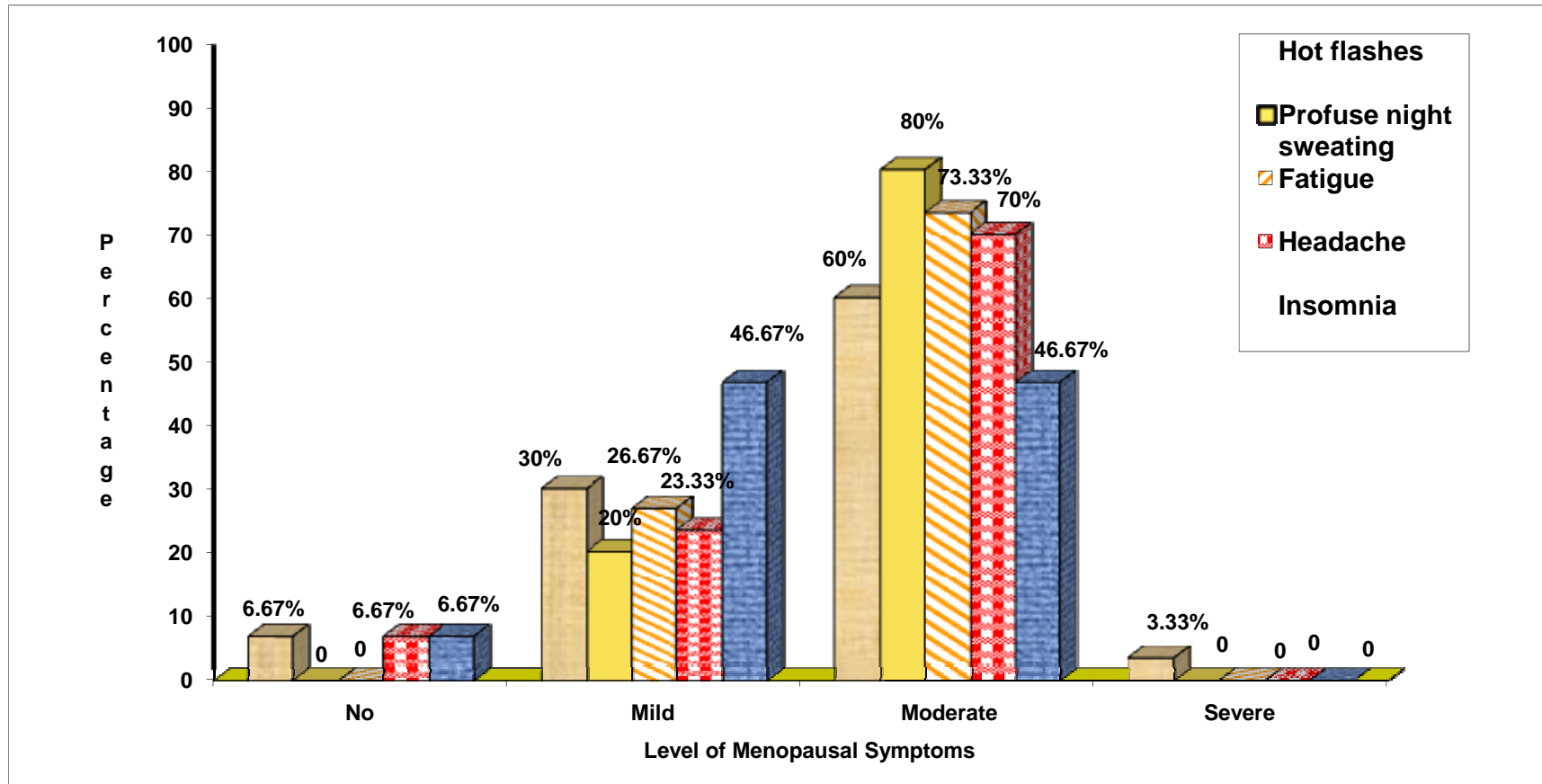
With regard to hot flashes, majority 18(60%) had moderate level, 9(30%) had mild level, 2(6.67%) had no symptom of hot flashes and 1(3.33%) had severe level of hot flashes.

With respect to profuse night sweating, majority 24(80%) had moderate level, and 6(20%) had mild level, none of them had severe level, and none of them had no symptom of profuse night sweating.

Considering the fatigue, majority 22(73.33%) had moderate level of fatigue ,8(26.67%) had mild level of fatigue, none of them had severe level and none of them had no symptom of fatigue.

Regarding headache, majority 21(70%) had moderate headache, 7(23.33%) had mild and 2(6.67%) had no symptom of headache and none of them had severe level of headache.

With respect to insomnia, majority 14(46.67%) each had moderate and mild level of insomnia and 2(6.67%) had no insomnia and none of them had severe level of insomnia.



Fig(x) Percentage distribution of post test level of menapausal symptoms in the experimental group

Table -V
Frequency and percentage distribution of posttest level of selected menopausal symptoms in the control group

n=30

Menopausal Symptoms	No		Mild		Moderate		Severe	
	No.	%	No.	%	No.	%	No.	%
Hot flashes	3	10.0	1	3.33	13	43.33	13	43.33
Profuse night sweating	2	6.67	1	3.33	17	56.67	10	33.33
Fatigue	-	-	-	-	7	23.33	23	76.67
Headache	-	-	1	3.33	9	30.0	20	66.67
Insomnia	1	3.33	1	3.33	9	30.0	19	63.33

The table V shows the frequency and percentage distribution of posttest level of selected menopausal symptoms in the control group.

With regard to hot flashes, majority 13(43.33%) had severe level, 13(43.33%) had moderate level, 3(10.0%) had no hot flashes and 1(3.33%) had mild level of hot flashes.

With respect to profuse night sweating, majority 17(56.67%) had moderate level, 10(33.33%) had severe level, 2(6.67%) had no night sweating and 1(3.33%) had mild level of profuse night sweating.

Considering the fatigue, majority 23(76.67%) had severe level, 7(23.33%) had moderate level, none of them had mild and no symptom of fatigue.

Regarding headache, majority 20(66.67%) had severe level, 9(30%) had moderate and 1(3.33%) had mild and none of them had no symptom of headache.

With respect to insomnia, majority 19(63.33%) each had severe level of insomnia, 9(30%) had moderate, 1(3.33) had mild and 1(3.33%) had no insomnia.

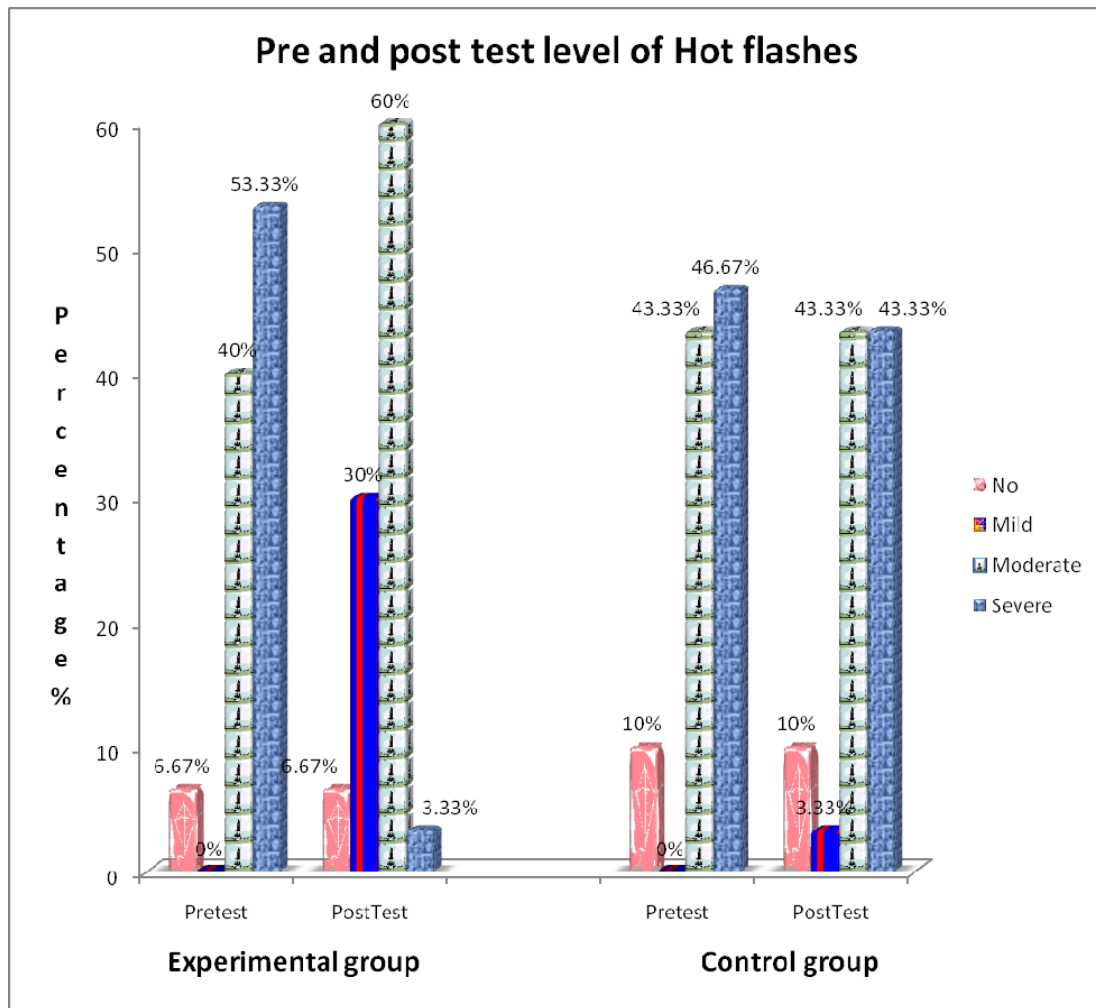


Figure (xi) Shows the percentage distribution of pre and posttest level of hotflashes in Experimental and control group.

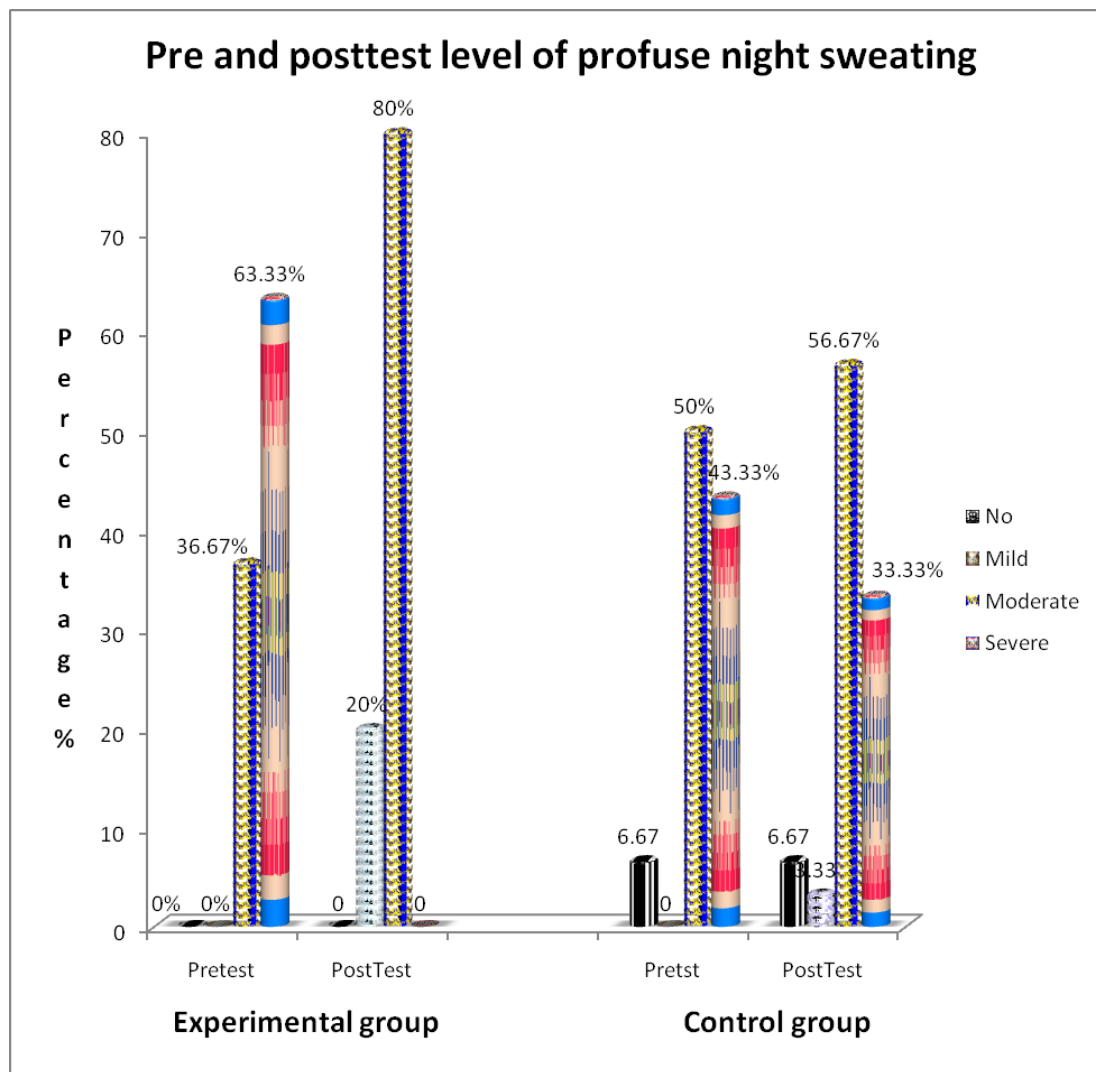


Figure (xii) Shows the percentage distribution of pre and posttest level of profuse night sweating in Experimental and control group.

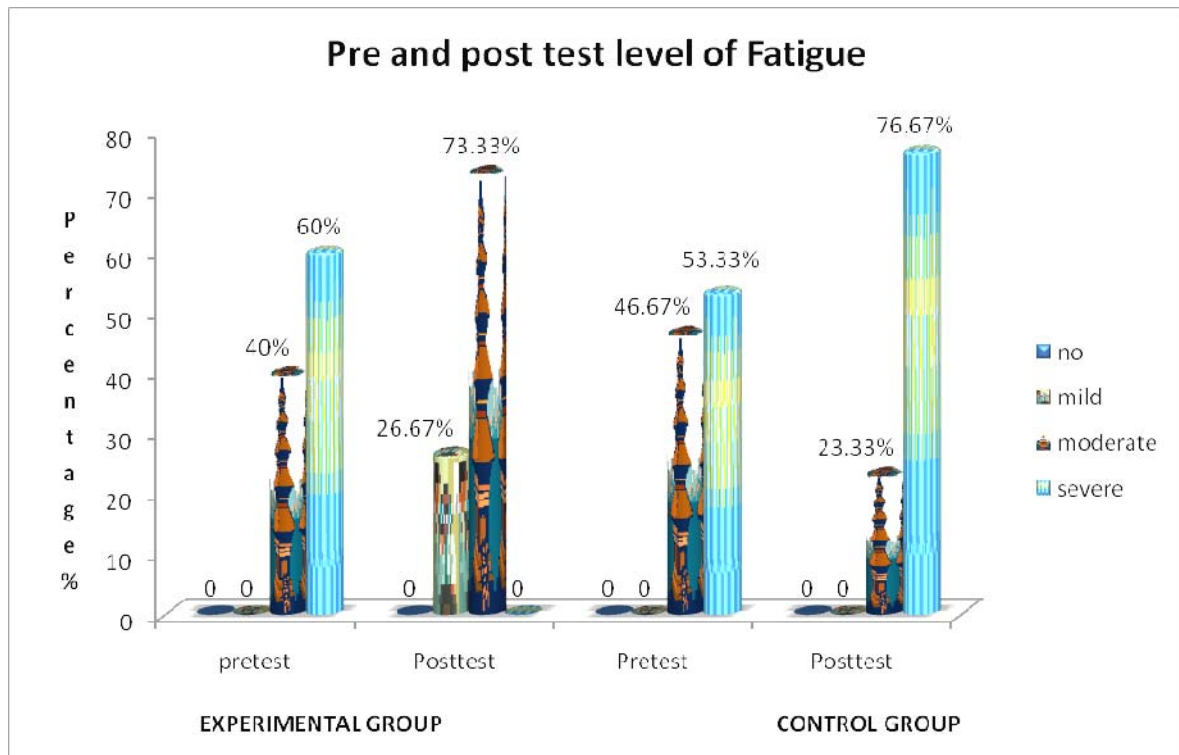


Figure (xiii) Shows the percentage distribution of pre and posttest level of fatigue in Experimental and control group.

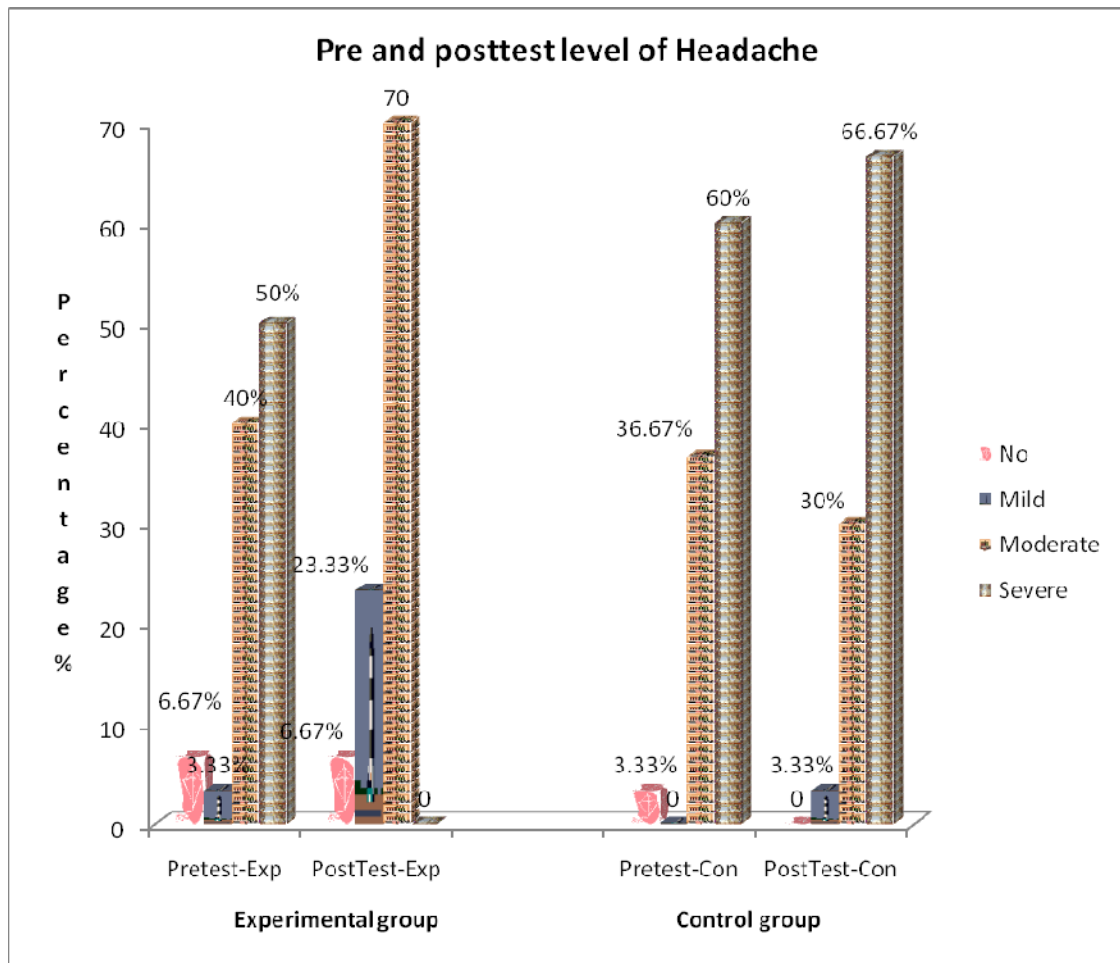


Figure (xiv) Shows the percentage distribution of pre and posttest level of headache in Experimental and control group.

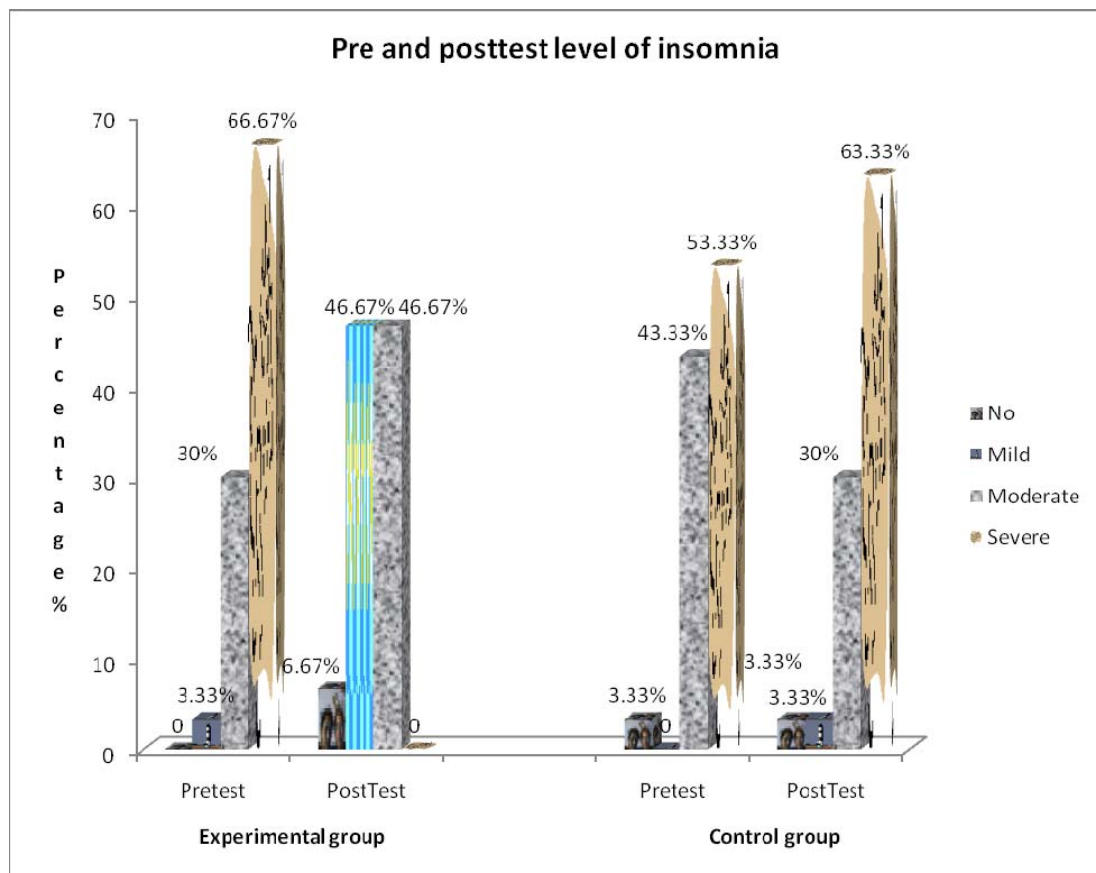


Figure (xv) Shows the percentage distribution of pre and posttest level of insomnia in Experimental and control group

Table –VI

Frequency and percentage distribution of overall pretest and post level of selected menopausal symptoms in the experimental group

n=30

Menopausal Symptoms	Mild		Moderate		Severe	
	No.	%	No.	%	No.	%
Pretest	-	-	3	10.0	27	90.0
Post Test	1	3.33	29	96.67	-	-

The table VI shows the comparison of pretest and post level of selected menopausal symptoms in the experimental group.

Considering pre test majority 27(90.0%), are in severe level, 3(10.0%) are in moderate level, and none of them are in mild level of menopausal symptoms.

With regard post test majority 29(96.67%) are in moderate level, 1(3.33%) are in mild level and none of them are in severe level of menopausal symptoms.

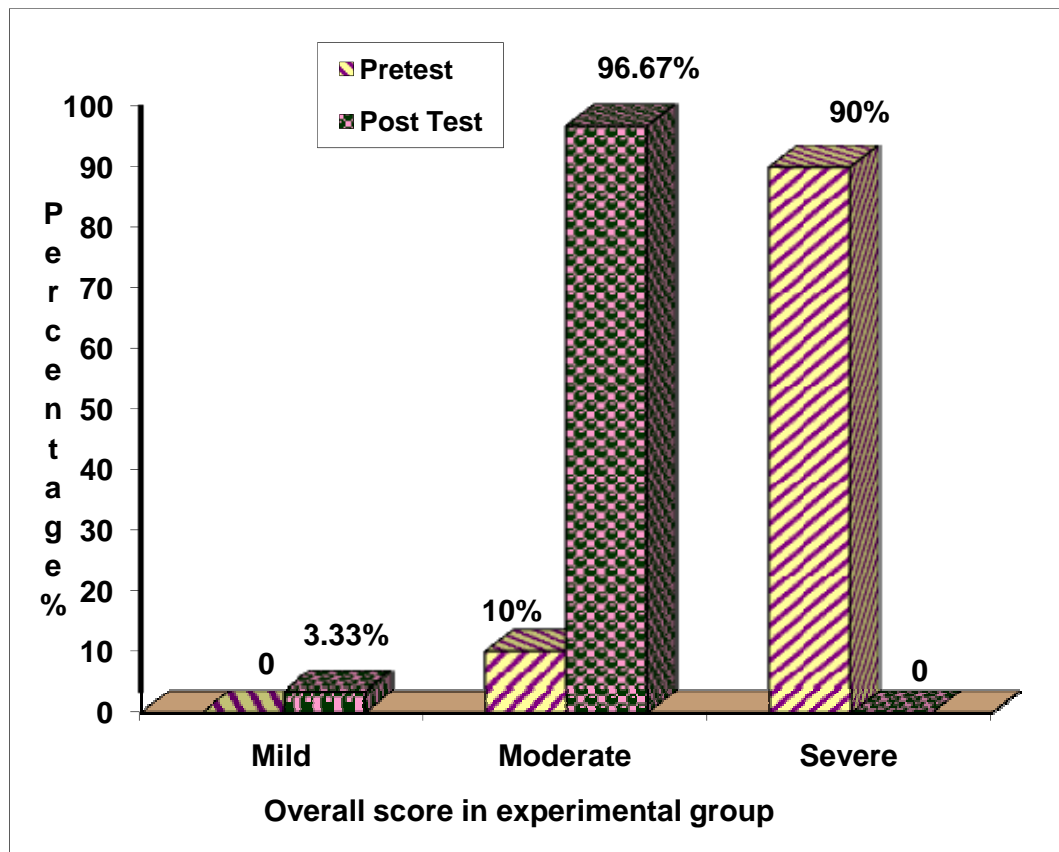


Fig.(xvi): Percentage distribution of overall pretest and post level of selected menopausal symptoms in the experimental group

Table –VII
Frequency and percentage distribution of overall pretest and post level of selected
menopausal symptoms in the control group

n=30

Menopausal Symptoms	Mild		Moderate		Severe	
	No.	%	No.	%	No.	%
Pretest	-	-	3	10.0	27	90.0
Post Test	-	-	4	13.33	26	86.67

The table VII shows the Comparison of pretest and post level of selected menopausal symptoms in the control group.

Considering pre test majority 27(90.0%), are in severe level, 3(10.0%) are in moderate level, and none of them are in mild level of menopausal symptoms.

With regard post test majority 26(86.67%) are in severe level, 4(13.33%) are in moderate level and none of them are in mild level of menopausal symptoms.

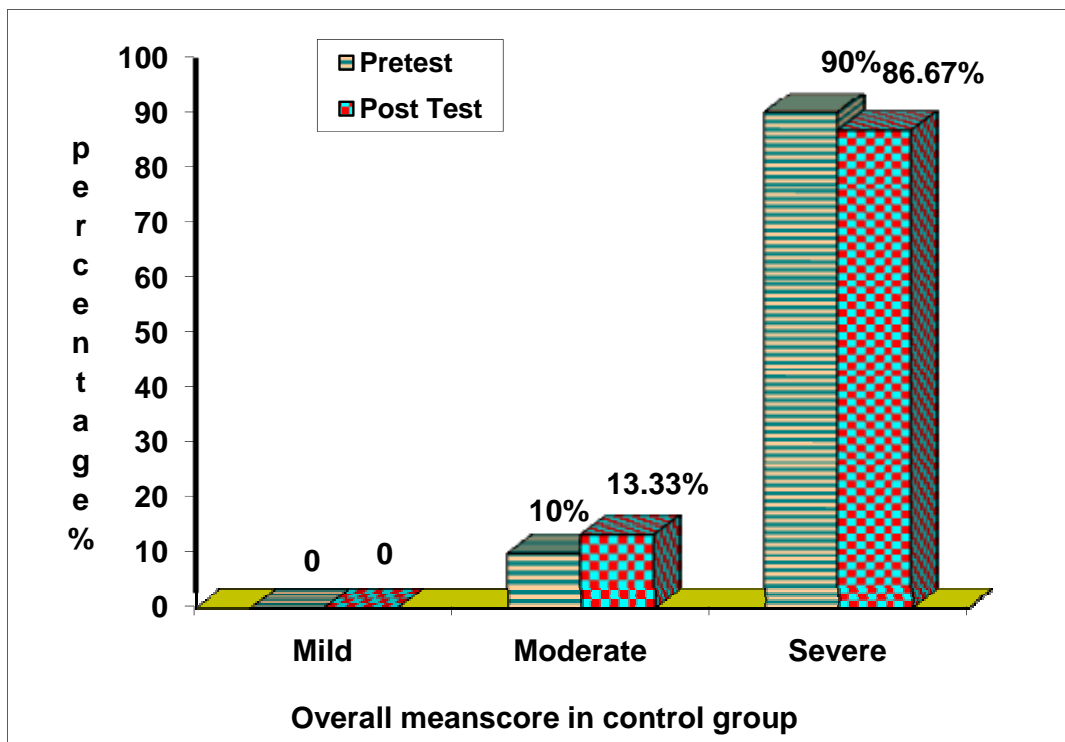


Figure (xvii): Percentage distribution of overall pretest and post level of selected menopausal symptoms in the control group.

SECTION - D

Table VIII

Comparison of pretest and post test level of menopausal symptoms score in the experimental and control group

n=60

Group	Pretest		Post Test		't' Value
	Mean	S.D	Mean	S.D	
Experimental Group	12.60	1.48	8.17	1.12	t = 24.130*** p = 0.000, (S)
Control Group	12.10	1.35	12.30	1.51	t = 00.902 p = 0.375, (N.S)

***p<0.001, S – Significant, N.S – Not Significant

The table VIII shows the comparison of pretest and post test level of menopausal symptoms score in the experimental and control group,

Considering the experimental group, the pretest mean score was 12.60 with S.D 1.48, regarding the post test, the mean score was 8.17 with S.D 1.12. The calculated 't' value was 24.130 which was statistically highly significant at p<0.001 level.

With respect in the control group, the pretest mean score was 12.10 with S.D 1.35 and regarding the post test the mean score was 12.30 with S.D 1.51. The calculated 't' value was 00.902 which was not significant at p=0.375, which shows that there was no significant difference between the pretest and post test level of selected menopausal symptoms.

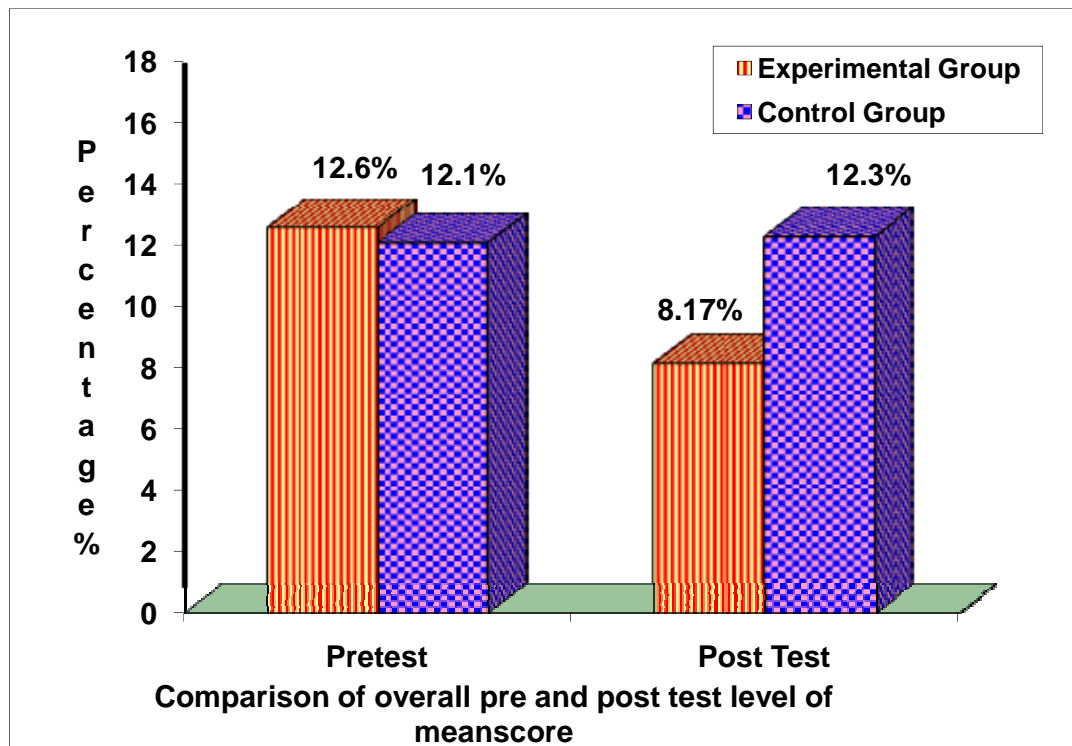


Fig.(xviii): Comparison of pretest and post test level of menopausal symptoms score in the experimental and control group.

SECTION – E

Table -IX

Association of post test level of menopausal symptoms with the demographic variables in the experimental group.

=30

Demographic Variables	Mild		Moderate		Chi-Square Value
	No.	%	No.	%	
Age in years					$\chi^2 = 1.552$ d.f = 2 p = 0.460 N.S
45 - 46 years	-	-	9	30.0	
47 - 48 years	1	3.3	11	36.7	
49 - 50 years	-	-	9	30.0	
Education					$\chi^2 = 2.414$ d.f = 3 p = 0.491 N.S
Illiterate	-	-	6	20.0	
Primary	-	-	13	43.3	
Higher secondary	1	3.3	8	26.7	
Graduate	-	-	2	6.7	
Occupation					$\chi^2 = 0.115$ d.f = 1 p = 0.735 N.S
Govt. employee	-	-	-	-	
Private	-	-	3	10.0	
House wife	1	3.3	26	86.7	
Type of work					$\chi^2 = 1.182$ d.f = 2 p = 0.554 N.S
Sedentary	-	-	10	33.3	
Moderate	1	3.3	13	43.3	
Heavy	-	-	6	20.0	
Type of food					$\chi^2 = 0.074$ d.f = 1 p = 0.786 N.S
Vegetarian	-	-	2	6.7	
Non-vegetarian	1	3.3	27	90.0	
Mode of delivery					$\chi^2 = 0.791$ d.f = 1 p = 0.374 N.S
Normal delivery	1	3.3	16	53.3	
LSCS	-	-	13	43.3	

Number of delivery					$\chi^2 = 0.905$
1	-	-	2	10.0	d.f = 2
2	1	3.3	15	50.0	p = 0.636
More than two	-	-	11	36.7	N.S

N.S – Not Significant

The table IX shows that none of the demographic variable had statistically significant association with the post test level of menopausal symptoms in the experimental group.

Table -X

Association of post test level of menopausal symptoms with the demographic variables in the control group

n=30

Demographic Variables	Moderate		Severe		Chi-Square Value
	No.	%	No.	%	
Age in years					$\chi^2 = 0.149$ d.f = 2 p = 0.928 N.S
45 - 46 years	1	3.3	6	20.0	
47 - 48 years	2	6.7	11	36.7	
49 - 50 years	1	3.3	9	30.0	
Education					$\chi^2 = 3.280$ d.f = 3 p = 0.350 N.S
Illiterate	2	6.7	5	16.7	
Primary	1	3.3	10	33.3	
Higher secondary	-	-	8	26.7	
Degree holder	1	3.3	3	10.0	
Occupation					$\chi^2 = 2.596$ d.f = 2 p = 0.273 N.S
Govt. employee	1	3.3	2	6.7	
Private	-	-	9	30.0	
House wife	3	10.0	15	50.0	
Type of work					$\chi^2 = 0.639$ d.f = 2 p = 0.726 N.S
Sedentary	2	6.7	9	30.0	
Moderate	1	3.3	12	40.0	
Heavy	1	3.3	5	16.7	
Type of food					$\chi^2 = 0.513$ d.f = 1 p = 0.474 N.S
Vegetarian	-	-	3	10.0	
Non0vegetarian	4	13.3	23	76.7	
Mode of delivery					$\chi^2 = 1.154$ d.f = 1 p = 0.283 N.S
Normal delivery	1	3.3	14	46.7	
LSCS	3	10.0	12	40.0	

Number of delivery					$\chi^2 = 0.400$ d.f = 2 p = 0.819 N.S
1	1	3.3	7	23.3	
2	2	6.7	9	30.0	
More than two	1	3.3	10	33.3	

N.S – Not Significant

The table X shows that none of the demographic variables had shown any statistically significant association with the post test level of selected menopausal symptoms in the control group.

CHAPTER – V

DISCUSSION

This chapter discusses the findings of the study derived from descriptive and inferential statistical analysis.

The statement of the problem was “A study to assess the outcome of pranayama on selected menopausal symptoms among menopausal women in Kainoor Village, Arakonam Taluk, Vellore District”.

The objectives were

1. To assess the pretest level of selected menopausal symptoms among menopausal women in experimental and control group.
2. To assess the post test level of selected menopausal symptoms among the menopausal women in experimental and control group.
3. To determine the outcome of pranayama on selected menopausal symptoms among the menopausal women in experimental and control group.
4. To associate the post test level of pranayama among menopausal women with their selected demographic variables in experimental and control group

The demographic variables selected in the study were age , education, occupation, type of work, type of food, mode of delivery and number of delivery.

The frequency and percentage distribution of demographic variables in the experimental group considering age majority 12(40%) were aged between 47 – 48 yrs, regarding education, majority 13(43.3%) were primary education, regarding occupation, majority 27(90%) were house wives, considering type of work 14(46.67%) were moderate workers, with respect to the type of food 28(93.33%) were non-vegetarian, regarding type of delivery 17(56.67%) were normal delivery, considering number of children 16(53.33%) had two children.

Regarding the control group 12(40%) were aged between 47 – 48 yrs, considering education 11(36.67%) were comes in majority under primary education, regarding occupation, majority 18(60%) were house wives, considering type of work 13(43.33%) were moderate workers, with respect to type of food 27(90%) were non0vegetarian, regarding mode of delivery 15(50%) were normal delivery and LSCS , considering number of children 16(53.33%) had two children.

Here with the demographic variable, age in years and type of food shows the homogeneity.

The First objective was to assess the pretest level of selected menopausal symptoms among menopausal women in experimental and control group.

In the experimental group, considering the symptom, hot flashes majority 16(53.33%) had severe hot flashes, regarding the symptom profuse night sweating, 19(63.33%) had severe level, with respect to the symptom fatigue, 18(60%) had severe level ,considering the symptom headache 15(50.0%) had severe level, regarding the symptom insomnia 20(66.7%) had severe level, and in control group, considering the symptom hot flushes 14(46.67%) majority are in severe level, regarding the symptom profuse night sweating 13(43.33%) were in severe level, with respect to the symptom fatigue 16(53.3%) were in severe level, considering the symptom headache 18(60.0%) were in severe level, regarding the symptom insomnia 16(53.33%) were in severe level.

The study findings were consistent with the study conducted by Rahman SA et al (2004) to determine the menopausal symptoms among Sarawakian women using modified MRS questionnaire among 356 women aged 40-65 years and were interviewed to document 11 symptoms commonly associated with menopause. The most prevalent symptoms reported were joint pain and muscular discomfort [80.11%], physical and mental exhaustion [67.1%] and sleeping problems (52.2%), followed by hot flashes and sweating (41.6%), irritability 37.9%, dryness of vagina (37.9%), anxiety (36.5%), depressive mood (32.6%), other complaints noted were sexual problem (30.9%), bladder problem (13.8%) and heart discomfort (18.3%).

The Second objective was to assess the post test level of selected menopausal symptoms among the menopausal women in experimental and control group.

In experimental group the post test level considering the symptom hotflushes majority 18(60.0%), were in moderate level, with regard to profuse night sweating 24(80.0%) were in moderate level, regarding fatigue 22(73.33%) were in moderate level, considering headache 21(70.0%) were in moderate level, with regard insomnia 14(46.67%) were in moderate level and in the control group, the majority 13(43.33%) had moderate and severe level of hot flushes. Regarding profuse night sweating majority 17(56.67%) had moderate level, with respect to fatigue majority 23(76.67%) had severe level, considering headache majority 18(60.0%) had severe level, regarding insomnia majority 19(63.33%) had severe level of insomnia.

The study findings were supported by J. Burt, J. et al, (2009) study aimed to explore the efficacy of Yoga Therapy in the treatment for Sleep Disturbance or Insomnia. Ten clients of a local Yoga Studio who were troubled by Insomnia were invited to take part in a Yoga Therapy Program. The Program consisted of six weekly one hour Yoga Therapy sessions at the Studio as a group, the techniques learned were applied at home between sessions. Pre test were conducted to all participants. Tool used were 5 point scale from worst to best. Pre and post-Program Pittsburgh Sleep Quality Index questionnaires were completed. Results shows that Participation in the Yoga Therapy Program were excellent, as completion of the questionnaires. Occupational functioning improved 24.6%, Physical functioning improved 16.1%, Social functioning improved 20.6%; General Health improved 9.1%, Quality of Life improved 31.25% and Emotional Health improved 36.7%. It Concludes that the Yoga Therapy Program resulted in a significant improvement in Participant's sleep patterns using easily replicated Yoga, breathing and relaxation techniques,

The Third objective was to determine the outcome of pranayama on selected menopausal symptoms among the menopausal women in experimental and control group.

In the experimental group, the pretest mean score was 12.60 with S.D 1.48 and in the post test the mean score was 8.17 with S.D 1.12. The calculated 't' value was 24.130 which was statistically highly significant at $p < 0.001$ level.

Hence the research hypothesis H_1 stated that "there will be a significant relation between pranayama on selected menopausal symptoms among menopausal women" was accepted.

The study findings were supported by Little, M. et al (2010) who conducted a study to gauge the impact of a prescribed pranayama practice on Emotional Intelligence, in particular its influence on an individual's outlook on life and their response/reactions to life. This multiple case study (N=8) of four weeks duration evaluated the effects of a daily practice of nadi shodhana (alternate nostril breathing) on Emotional Intelligence (EI). Participants were recruited from fitness centres and Yoga schools in suburban Melbourne and the randomly selected group consisted of eight females with an age range of 18 to 50. Participants were taught the nadi shodhana breathing practice and asked to practice it for eight rounds after rising each morning. A 'self-reporting' Trait Emotional Intelligence questionnaire was used in beginning, midway and at the end of the study. The four categories of EI measured :well-being, self-control, emotionality and sociability. The result shows there was improvement noted in the areas of Self Control. This study did show improvement in two of the areas of EI, following the daily practice of nadi shodhana pranayama.

The conceptual framework of this study was based on modified Weidenbach's helping art of clinical nursing theory [1964]. The investigator adopted this model and perceived apt in enabling to assist the outcome of pranayama on selected menopausal symptoms. This model views the menopausal symptoms among menopausal women as an individual unique experience that is in need for relief from menopausal symptoms. The central purpose of the study is to reduce severity of menopausal symptoms among

menopausal women. The investigator planned the prescription that would fulfill the central purpose (reduce severity of menopausal symptoms) by identifying the various means to achieve the goal. Thus the investigator selected two groups where pranayama was provided for one group and mass health education was given for the other group after the study. The study findings concluded that the women in experimental group had reduction in the selected menopausal symptoms when compared with control group after the intervention; hence pranayama can be incorporated as an effective therapy in managing selected menopausal symptom among menopausal women.

The Fourth objective was to associate the post test level of pranayama among menopausal women with their selected demographic variables in experimental and control group

The association table reveals that none of the demographic variables had shown any statistically significant association with the post test level of menopausal symptoms in the experimental group.

CHAPTER – VI

SUMMARY, NURSING IMPLICATIONS, RECOMMENDATIONS AND LIMITATION

This chapter presents the summary of the study and conclusion drawn. It clarifies the Nursing implication, Recommendation and Limitation of the study in different areas of life Nursing practice, Nursing administration, Nursing education, Nursing research.

SUMMARY OF THE STUDY

The statement of the study was “A study to assess the outcome of pranayama on selected menopausal symptoms among menopausal women in Kainoor and perumuchi village, Arakonam taluk, vellore district”

The objectives of the study were

1. To assess the pre-test level of selected menopausal symptoms among menopausal women in experimental and control group
2. To assess the post-test level of selected menopausal symptoms among menopausal women in experimental and control group
3. To determine the outcome of pranayama on menopausal symptoms among menopausal women in experimental and control group
4. To associate the post test level of pranayama among menopausal women in their selected selected demographic variables in experimental and control group .

The assumptions of the study were

1. Menopausal women may experience some menopausal symptoms.
2. Pranayama have some effect on selected menopausal symptoms among menopausal women.
3. Menopausal symptoms vary from women to women.

The following Research Hypothesis was set for the study

H₁: There is a significant relationship between pranayama on selected menopausal symptoms among menopausal women.

Review of literature revealed studies related to pranayama and outcome of pranayama on selected menopausal symptoms among menopausal women. The conceptual frame work adopted for the study was based on modified Weidenbach's helping art of clinical nursing theory [1964]. The evaluative approach and a quasi experimental design was used. The study was conducted in rural area of Kainoor village, Arakonam Taluk. Menopausal women who fulfilled inclusion criteria were selected non - probability purposive sampling technique was assigned into experimental and control group respectively. Pilot study and the main study were conducted in the venkatesapuram village, Arakonam. Consent was obtained and confidentiality of the response was assured. Pre-test was done by using structured interview questionnaire method and by using modified menopausal rating scale. Menopausal women in experimental group practiced pranayama and then the level of menopausal symptoms was assessed by using the same scale. But in control group post-test was assessed without any interventions.

The study findings concluded that the women in experimental group had reduction in selected menopausal symptoms. when compared with control group after the intervention; hence pranayama can be incorporated as an effective therapy in managing selected menopausal symptom among menopausal women.

NURSING IMPLICATIONS

The investigator has derived the following implication from the study which is vital concern in the field of nursing practices, administration, education and research.

Nursing Practice

1. The Nurse should insist pranayama as a routine therapy among menopausal woman to manage menopausal problems.
2. The Nurse should advocate the clients regarding yoga and help them to choose appropriate therapy.

Nursing Administration

1. The Nurse administrator should organize public awareness program in their organization on yoga and pranayama and its wide range of benefit to menopausal women.

Nursing Education

1. The Nurse Educator should involve the concept of yoga in Nursing practice.
2. Educator can encourage the nurse to bring out innovative and creative ideas pertaining to management of selected menopausal symptoms.
3. Yoga is a specialized field that can be integrated with nursing curriculum as a extracurricular subject.

Nursing Research

1. Nurse researcher can provide more research in this evolving discipline.
2. The finding of the study serves as a basic for the student to conduct further studies regarding management of menopausal symptoms.

RECOMMENDATION

1. A similar study can be conducted with a large sample size with longer duration.
2. A comparative study can be conducted among the perimenopausal and post menopausal woman.
3. A comparative study can be conducted in different hospital settings.
4. Health education program can be organized for menopausal woman regarding management of menopausal symptoms.

LIMITATION

The review of literature does not contain Indian studies related to pranayama on menopausal symptom due to its non availability.

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www.Menopausal symptoms.com

www.Menopusal rating scale

www.yoga.com

APPENDIX – A
LIST OF EXPERTS FOR CONTENT VALIDITY

- 1. Dr. Mrs. C. Susila, R.N., R.M M.Sc (N)., Ph.D.**
Principal,
Billroth College of Nursing,
Chennai.
- 2. Mrs. Rosaline Rachel, R.N., R.M., M.Sc (N),.**
Principal,
Indira College of Nursing,
Tiruvallur,
Chennai.
- 3. Mrs. JayaBharathi, R.N., R.M., M.Sc (N),.**
Reader – Maternal Health Nursing Department
SRM College of Nursing,
Chennai.
- 4. Mr.R.Mohan, B.A., D.Y.J. (Yoga)**
Yoga Professor,
Bhagya Lakshmi Nagar,
Arakkonam.
- 5. Mrs.Dhanalakshmi, M.B.B.S., DGO.,**
Medical Officer,
Shenoy Nagar Health Post.
Chennai.

LETTER SEEKING EXPERTS OPINION FOR CONTENT VALIDITY

From,

Ms.c.shenbagam

M.Sc.(N) I Year,

Vel R.S Medical College – College of Nursing,

Avadi, Chennai – 600 062.

To

Respected Madam/Sir,

Sub: Requisition for expert opinion on suggestion for content validity of the tools.

I am Miss.c.shenbagam, a student of M.Sc.(Nursing)- II year at Vel R.S Medical College - College of Nursing, Avadi, Chennai – 62, affiliated to Dr.M.G.R.Medical University, Chennai.

As a partial fulfillment of the requirement in the M.Sc. Nursing Programme, I have to complete a dissertation the topic I have selected is **“A study to assess the effectiveness of pranayama on selected menopausal symptoms among menopausal women in selected setting”**

Herewith I am sending the developed tools for content validity and for your expert opinion & valuable suggestions.

Thanking you,

Yours sincerely,
(SHENBAGAM.C)

Enclosures:

1. Statement and objectives of the study
2. Blue print of the tools
3. Content validity certificate

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tools developed by Miss. C.Shenbagam, M.Sc. Nursing, IInd year student , Vel R. S. Medical College - College of Nursing, Chennai on the topic "A Study to assess the effectiveness of pranayama on selected menopausal symptoms among menopausal women in Arakkonam", is validated by the undersigned and she can proceed with this tool to conduct the main study.

Place:

Date:



C. Susila

SIGNATURE

Dr.C. SUSILA M.sc (N) Ph.D

PRINCIPAL

BILLROTH COLLEGE OF NURSING

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tools developed by **Miss. C.Shenbagam**, M.Sc. Nursing, IInd year student , Vel R. S. Medical College - College of Nursing, Chennai on the topic **“A Study to assess the effectiveness of pranayama on selected menopausal symptoms among menopausal women in Arakkonam”**. is validated by the undersigned and she can proceed with this tool to conduct the main study.



SIGNATURE

Place:

Date:

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tools developed by Miss. C. Shenbagam, M.Sc. Nursing, IInd year student, Vel R. S. Medical College - College of Nursing, Chennai on the topic "A Study to assess the effectiveness of pranayama on selected menopausal symptoms among menopausal women in Arakkonam". is validated by the undersigned and she can proceed with this tool to conduct the main study.


SIGNATURE

Place: Chennai

Date: 8.6.11.

Comments:-

- * Questions can be elaborate.
- * many questions can be asked under each variable
- * Selected variables can be concentrated more.

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tools developed by **Miss. C.Shenbagam, M.Sc.** Nursing, IInd year student , Vel R. S. Medical College - College of Nursing, Chennai on the topic "**A Study to assess the effectiveness of pranayama on selected menopausal symptoms among menopausal women in Arakkonam**", is validated by the undersigned and she can proceed with this tool to conduct the main study.

SIGNATURE

**MEDICAL OFFICER
SHENOY NAGAR HEALTH POST,
-OFWB, CORPORATION OF CHENNAI**

Place:

Date:

**VELLORE DISTRICT YOGA DEVELOPMENT
ASSOCIATION**

#388,Bhakiyalakshmi

Nagar,Venkatesapuram,arakkonam-631002.

Cell no: 9940859957,9025865549.

**President,
K.Raghunathan,B.sc,
Cell:9444494327.**

**Founder,District Secretary,
R.Mohan,B.A.,D.Y.J.(Yoga)
“Yoga Professor”
cell:9940859957.**

Date: 5:6:2011

This is to certify that Ms. C.SHENBAGAM. Msc Nursing
I year studying in Vel R. S. Medical College – College of Nursing has
formally learnt ‘Pranayama’ and she can use this Yoga breathing technique
for conducting the study on “ effectiveness of pranayama on menopausal
symptoms among peri menopausal women”

yoga professor s signature,

LIFE POWER YOGA CENTRE (R)
Branch.

**# 388 Bhakiya Lakshmi Nagar,
Venketeshpuram, Arakkonam-2
Ph: 04177-225090, Cell: 9443840149**

APPENDIX – C

Tool

INTRODUCTION

Good Morning!

I am a student of Vel R.S.Medical College – College of Nursing, conducting a study to assess the outcome of pranayama on selected menopausal symptoms among menopausal women in selected setting.

I request you to permit me to include you as my study participant for interventions such as pranayama. These are known to reduce the menopausal symptoms. Further, I request you to kindly extend your co-operation in the smooth completion of the study.

All your responses will be kept in confidential.

Thanking You,

DEMOGRAPHIC VARIABLES

1. Age in years

- a) 45 – 46 years
- b) 47 – 48 years
- c) 49 – 50 years

2. Education

- a) Illiterate
- b) Primary
- c) Higher secondary
- d) Graduate

3. Occupation

- a) Government Employee
- b) Private Employee
- c) House wife

4. Type of work

- a) Sedentary work
- b) Moderate work
- c) Heavy work

5. Type of food

- a) Vegetarian
- b) Non vegetarian

6. Mode of delivery

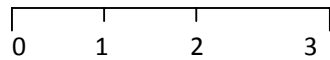
- a) Normal delivery
- b) LSCS

7. Number of delivery

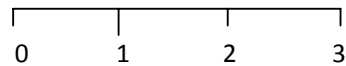
- a) 1
- b) 2
- c) More than two

MODIFIED MENOPAUSAL SYMPTOMS RATING SCALE**❖ 1.HOT FLASHES:**

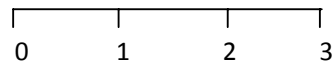
It describes about the severity of hotflashes.

**❖ 2. PROFUSE NIGHT SWEATING:**

It describes about the severity night sweating

**❖ 3. FATIGUE:**

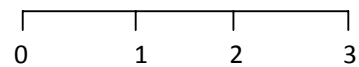
It describes about the intensity of fatigue.

**❖ 4. HEADACHE:**

It describes about the intensity of headache.

**❖ 5.INSOMNIA:**

It describes about the intensity of insomnia



❖ SCORING

- 0 - Not experiencing
- 1 - Once in a week
- 2 - 2 - 3 Times in a week
- 3 - Daily experiencing

❖ SCORING GRADES:

- 0-5 -MILD
- 6-10 –MODERATE
- 11-15 -SEVERE

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¿ìý §Åø ÷.±Š.ÁÕòÐÅ ,øæÃø - !°ÅøÄøÄ÷ ,øæÃøÄøø ÓÐ,"Ä
 Àð¼òÀÊòÒ þÃñ¼ìõ ññ! !°ÅøÄøÄ÷ ,øÅø ÄÄøø,ø§Èý. ¿ìý ±ý ÀÊòÀøý 'Õ
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 ±ÉÐ ñöÅøý Àì§,üÀìÇÄì, þ"½òÐì !,ìûÇ Áø, ¾ìú"ÁÔ¼ý §,ðì !,ìû,ø§Èý. þ¾ý
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¿ýÈø!

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1. $\text{Å} \hat{\text{A}} \text{Đ}$

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¬) 47-48 $\text{Å} \hat{\text{A}} \text{Đ}$

þ) 49-50 $\text{Å} \hat{\text{A}} \text{Đ}$

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7. ÌÆó"¾Áðý ±ñ½ðì",

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¬) 2

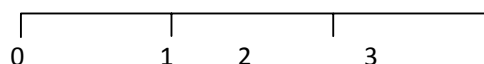
Þ) ÞÃñÊüì ÆÁð

ÁüÊÔÀð¼ çÄó¼ÄÁ, çýÈ ÀýÒ ðüÀî ÀÄî"É, ü ñ¼ÄÄ - ¼xõ «ÇÅÎ

„Æ ì,î,ðÀðüÇ ÀðÊÄ Ä,Äç çí,ü - ü½Õ Æ¼Ä¼ð ìö çÜð¼ð¼ü Àý ÄÕ «ÈìÈççý ±ñ½ Äð¼Ä¼xõ. çí,ü Äð¼Äî ±ñçý Ä¼ðÒ ÀýÄÖÁÜ, Ä¼ðÒ '0' ±ýÈð ÞÄÄÄ «ÜÄð¼¼çÄ, '1' ±ýÈð ÄÄð¼ü Õ ÓÈ, '2' ±ýÈð ÄÄ¼ð ÞÄÄÄÖð äýÜ ÓÈ ÄÄ, '3' ¼ÉÓõ.

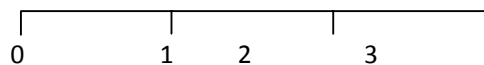
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þ¼ «Çx§,ð, -¼ÄÄ¼¼Äý ÄÇì,xÄÄ - ü¼ìõ.



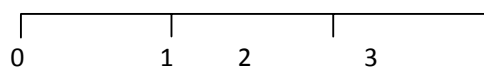
2. §ð÷x:

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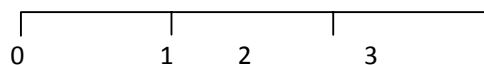
3. ¼ÄÄÄç:

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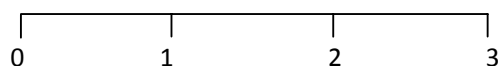
4. àìÄýÄ:

þ¼ «Çx§,ð, àìÄýÄÄý ÄÇì,xÄÄ - ü¼ìõ.



5. ÞÄÄç «¼ç, Ä, ÄÄ÷ð¼:

þ¼ «Çx§,ð, ÞÄÄç «¼ç, Ä, ÄÄ÷ð¼Äý ¼ýÄÄÄÄç, ÄÄÄ - ü¼ìõ.



Ä¼ðÒü:

0-5 - §ÄðÉ

6 – 10 - $\hat{A}\phi^{\frac{3}{4}}\hat{A}_i\hat{E}$

11 – 15 - $_{,}\hat{I}^{\sim}\hat{A}\hat{A}_i\hat{E}$



VEL R.S. Medical College

(College of Nursing)



Owned by R.S. Trust
(Approved by Govt. of Tamil Nadu,
Indian Nursing Council, New Delhi, Tamil Nadu Nurses & Midwives Council &
Affiliated to The Tamil Nadu Dr. M.G.R. Medical University)
No. 42, Avadi - Vel Tech Road,
Vellannur (Post), Avadi, Chennai - 600 062
E-mail : vrsmc_con@yahoo.com



Ref.No.:29/VP-ST/03-2011-1000 Nes

Administrative Office:

"Santi Sudha", # 38 (Old No. 24),
ABM Avenue, (Opp. Park Sheraton Hotel),
Chennai - 600 026. India.
Phone off : 24355648, 24334845, 24335828
Residence : 24344708
Fax : 24340386, 24357591
Grams : VELGROUP CHENNAI - 28
E-mail : veltech@vsnl.com
Website : www.vel-tech.org
www.velnursing.com
Phone : 26376869 Fax : 26841601

02/05/11

To

Sub: Seeking permission for conducting main study -reg.,

Respected Sir/Madam,

This is to introduce Ms.C.Shenbagam, Master Degree Nursing student of this college. She has selected the following topic for the Research study to be submitted to the TN.Dr.M.G.R Medical University as partial fulfillment of the master degree in nursing program.

The topic for the study is "Effectiveness of pranayama on selected menopausal symptoms among menopausal women".

She is interested in conducting Main Study & pilot study at your estimated institution.

I assure you that our student will abide by the rules and regulations of the Institution. I request you're at most help in regard to the same.

Thanking you,

Place:

Date

Prof.Mrs.M.Anuradha

PRINCIPAL

VEL R. S. MEDICAL COLLEGE
(COLLEGE OF NURSING)
42, AVADI-ALAMATHI ROAD
VELLANNUR - CHENNAI-600 062

*

[Signature]
சென்னை
சென்னை சர்க்கார் மருத்துவ கல்லூரி



VEL R.S. Medical College

(College of Nursing)

Owned by R.S. Trust

(Approved by Govt. of Tamil Nadu,

Indian Nursing Council, New Delhi, Tamil Nadu Nurses & Midwives Council &

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E-mail : veltech@vsnl.com

Website : www.vel-tech.org

www.velnursing.com

Phone : 26376689 Fax : 26841601

02/05/11

To

Sub: Seeking permission for conducting main study –reg.,

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She is interested in conducting Main Study & pilot study at your estimated institution.

I assure you that our student will abide by the rules and regulations of the Institution. I request you're at most help in regard to the same.

Thanking you,

Place:

Date

A. Sathigowthay
PRESIDENT,
PERUMTHUR PANCHAYAT

Anuradha
Prof.Mrs.M.Anuradha
PRINCIPAL
VEL R. S. MEDICAL COLLEGE
(COLLEGE OF NURSING)
42, AVADI-ALAMAT ROAD
VELLIANUR

CERTIFICATE OF ENGLISH EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation work on the topic "A study to assess the effectiveness of pranayama on selected menopausal symptoms among menopausal women in selected village in Arakkonam, 2011-2012, done by Ms.C.Shenbagam, Msc(N) II year student, in VEL.R.S Medical college - college of nursing in Avadi, is edited for English language appropriateness by

Mr


 Signature 5.1.12
 A. PRAKASAM, M.A., B.Ed.,
 B.T. Asst. [English]
 Panchayat Union Middle School
 Kilvonpakkam Nemeli Union
 Vellore Dist-631 051.

Place: Prms Kilvonpakkam

Date 05.01.12.

CERTIFICATE OF TAMIL EDITING

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the Tamil Version of the dissertation work “**A Study to assess the effectiveness of pranayama on selected menopausal symptoms among menopausal women**” done by **Ms. C. Shenbagam.**, M.Sc (N) II year student of Vel. R. S Medical College - College of Nursing, Avadi, Chennai, is edited for Tamil language appropriateness.

Dr. C. Shenbagam
SIGNATURE 12/11/12 (12/11/12)
 தலைமை ஆசிரியர்,
 ஊ. ஒ. தொ. பள்ளி,
 இலுப்பைத்தண்டலம்,
 அரக்கோணம்-601151.

DATE:



